

DOCUMENT RESUME

ED 046 291

FL 002 079

AUTHOR Wolfe, David Edwin
TITLE A Study to Determine the Feasibility of Including the Direct Experiences of Microteaching and Team Teaching, and Interaction Analysis Training in the Pre-Service Training of Foreign Language Teachers.
PUB DATE 70
NOTE 143p.; Ph.D. dissertation
EDRS PRICE MF-\$0.65 HC-\$6.58
DESCRIPTORS Classroom Observation Techniques, Group Behavior, Instructional Program Divisions, *Interaction Process Analysis, *Language Instruction, Methods Research, Methods Teachers, *Microteaching, *Modern Languages, Performance Criteria, Program Effectiveness, Second Language Learning, Student Teaching, Teacher Attitudes, *Teacher Education, Teacher Educator Education, Teacher Programs, Team Teaching

ABSTRACT

This study examines potentially significant factors in the training of foreign language teachers. Remarks on microteaching and interaction analysis precede a review and analysis of related literature. Included in this section are the Stanford University Summer Intern Program, Amidon's model of microteaching and interaction analysis, and microteaching in foreign languages at Birgham Young University. A section on research design and experimental procedures used in this study leads to a review of data derived from a methods and a student-teaching course. Results are summarized in terms of implications for teacher training institutions, schools, and further research. Appendixes contain: (1) a teacher attitude survey form, (2) an anxiety and ability scale, (3) a student rating scale, (4) a teacher-performance-centered criteria evaluation form, (5) a classroom observation sheet, and (6) a sample microteaching unit for a first-year Spanish class. An extensive bibliography concludes the report. (RL)

ED0 46291

A STUDY TO DETERMINE THE FEASIBILITY OF INCLUDING
THE DIRECT EXPERIENCES OF MICROTEACHING AND TEAM
TEACHING, AND INTERACTION ANALYSIS TRAINING IN THE
PRE-SERVICE TRAINING OF FOREIGN LANGUAGE TEACHERS

By

David Edwin Wolfe

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Abstract

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By

David Edwin Wolfe, Ph. D.

The Ohio State University, 1970

Professor Frank Otto, Adviser

The purpose of this study was to determine the feasibility of including the direct experiences of micro- and team teaching, and of interaction analysis training in the pre-service component of teacher education for foreign language teachers. It further attempted to ascertain the effects of such training.

The study was undertaken during the foreign language methods course and during student teaching. During the methods course, the students were divided into two groups; Group I (n = 10) received the direct experiences during the methods course and interaction analysis training during student teaching. Group II (n = 10) received the standard methods course. The design used for the methods course was the pre-test -- post-test by randomization.

During student teaching each student was videotaped twice. Analysis of teaching performance was based on the first taping. Data for interaction analysis was collected from both tapings.

Seven instruments were used to collect data for the study:

1. The Teaching Situation Reaction Test. (TSRT)
2. An Attitude Survey.
3. An Ability and Anxiety Scale.
4. A Student Rating of Education Courses, and topics covered in each methods course.
5. The Foreign Language Attitude Questionnaire. (FLAQ)
6. The Student Teacher Attitude Questionnaire. (STAQ)
7. The Performance Centered Criteria. (PCC)

Several questions were asked and the above instruments served to answer them. The .10 level of significance was used to ascertain any trends as a result of the training.

Results of the study indicate that there is no significant difference in attitudes toward teaching as measured by the TSRT.

As measured by the Attitude Survey, there was no difference between the groups on items of understanding the purposes of dialogs, pattern practice, grammar generalization, and vocabulary teaching.

On items of how to teach the above activities there was significance in the direction of Group I on teaching the dialog.

On items of how the above four activities fit into an audio-lingual program there is significance on all post-test scores.

Ability to adapt or supplement materials for teaching seems to be unaffected by the direct experiences.

Students from Group I are better able to determine when learning has taken place. This is probably due to having worked with the pupils.

Students receiving direct experiences tend to have less anxiety prior to student teaching. They also report higher confidence in

their ability to teach Spanish.

Students in both methods courses rated their course as the most valuable education course; Group I students rated their experience slightly higher. Group I also rated microteaching as the most valuable component in the methods course.

Performance during student teaching, as judged by two unbiased raters, was non-significant.

There was no significant difference in the teaching verbal patterns of the two groups. Insufficient training (ten hours) was felt responsible for this.

There was no significant difference in student teacher attitude toward the co-operating teacher.

Pupils of student teachers having received interaction analysis training expressed less positive attitudes toward foreign languages. However, due to a high subject attrition ($n = 4$ for each group on this variable) the results were felt to be invalid, since chance for error was very high.

It was concluded that it was feasible to include the direct experiences of micro-teaching and team teaching with interaction analysis in the pre-service component of foreign language education.

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DEFINITION OF TERMS

The following terms are defined so that the reader will be better able to follow the discussion:

Direct Verbal Behavior -- Refers to categories five, six, seven, on the Flanders' Scale of Interaction Analysis. It is teacher-talk, which is giving information, facts, or lecturing (five); giving commands or directions (six); or justifying authority (seven).

Foreign Language Attitude Questionnaire -- An instrument devised by Moskowitz to measure student attitude toward foreign languages and correlates to the direct/indirect verbal categories of the Flanders' System.

I/D Ratio -- The percentage of indirect verbal behavior divided by the direct verbal behavior.

Indirect Verbal Behavior -- Refers to categories one, two, three, four on the Flanders' Scale of Interaction Analysis. It is teacher-talk which accepts or shows understanding of student feelings (one); praises or encourages students' ideas or responses (two); expands or elaborates on a student's ideas (three); or asks questions, either narrow or broad, to the students (four).

Interaction Analysis -- A system for describing and analyzing teacher-pupil verbal interaction.

Microteaching -- A scaled-down form of teaching that has a specific teaching focus, is limited to four or five pupils, and the lesson lasts from five to twenty minutes.

Performance Centered Criteria -- A form devised by Politzer to measure teaching performance by foreign language teachers.

Pupil -- As defined in this study, pupil always refers to learners in the public schools.

Student -- As defined by this study, student always refers to those involved in teacher training.

Student Teacher Attitude Questionnaire -- An instrument devised by Moskowitz to measure student teacher attitudes toward the student teacher's co-operating teacher.

Teacher Situation Reaction Test -- A forty-eight item test devised by Duncan to measure reactions to certain school situations. It can measure attitudes toward teaching and knowledge about teaching. It has also been used to predict success in student teaching.

CHAPTER I

INTRODUCTION

The pre-service training of the American teacher has usually been lacking in one critical area -- adequate direct experience prior to assuming a full-time teaching position. Many teachers face their first assignment with little more experience than six to nine weeks of student teaching. This "experience", student teaching, is usually filled with great anxiety, especially during the initial period of teaching. The student teacher frequently is affected by a "sink-or-swim" syndrome. The anxiety encountered during student teaching, often based on inexperience, lack of confidence, and other needs, frequently narrows the student teacher's perceptual field, since he cannot visualize the weaknesses that are pointed out by his supervisor. Consequently, behavior change is very difficult to effect. This perceptual narrowing also limits the number of behavioral alternatives the student teacher might perceive and incorporate during the teaching act. It forces him to be closed and defensive when his supervisor suggests alternatives, instead of being open and able to integrate these new behaviors.

The student teaching learning experience is limited, until the novice teacher becomes more open and can make meaningful changes. This concern is best summarized by Carl Rogers, in his book, On Becoming a Person, where Rogers defines "significant learning," (in terms of) specific behaviors:

1. The person comes to see himself differently.
2. He becomes more self-confident and self directing.
3. He becomes more flexible, less rigid, in his perceptions.
4. He becomes more open to the evidence, both of what is going on outside of himself and of what is going on inside of himself.

Various techniques have been used by instructors of methods courses, in an attempt to facilitate more "significant learning". One of the most popular is peer teaching, which can provide effective experiences for many students. Peer teaching is seen as unnatural, by this author, because of the prior knowledge and level of mastery possessed by the peers. One great advantage, however, is that he (the peer teacher) receives information about himself in the role of teacher -- important to Rogers' points one and four. There are additional techniques being explored currently, which have other advantages.

Simulation and microteaching -- techniques now often introduced into the preparation of pre-service teachers prior to student teaching -- have been attempted by various teacher training institutions to offer the student teachers feedback from an appropriate audience about their behavior. Simulation provides vicarious experiences with typical school settings, while microteaching may provide the direct experience with the type of pupil the student teacher will be facing in the student teaching experience. However, as contrasted with macroteaching, the microteacher concentrates on one particular strategy or concept and teaches until the performance is satisfactory to the microteaching supervisor. Thus, microteaching can be a performance-centered curriculum, in contact with real pupils. Further, it is used in an attempt to

integrate theory and demonstrations from the methods courses in order to present the pre-service teacher with a balance of training in theory and practice. These settings add dimensions of appropriateness and reality to Rogers' criteria.

Pre-service teacher training programs have inadequacies in other areas. In addition to the need for direct experiences, student teachers need to broaden their perceptions of themselves as teachers through meaningful feedback. Coupled with a narrow perceptual field, student teachers are usually unaware of the effect their verbal and/or non-verbal behavior has on their pupils. They may adopt a different verbal style, which they feel is appropriate to their new role of teacher, learned from observing the language of their own or other teachers. In spite of careful planning and their supervisor's caveats against constant talking, they end up doing just that. A verbal coding system can help student teachers become aware of their verbal behavior patterns, and under good conditions of support, may permit them to make appropriate changes. Interaction analysis, as developed by Flanders, for example, offers a vehicle for such feedback.

This dissertation is based upon the assumption that some type of well-designed direct experience prior to student teaching is needed by many prospective teachers. Secondly, it is assumed that student teachers need feedback based upon their verbal behavior. Such experiences may be provided through microteaching and interaction analysis.

What is Microteaching?

Microteaching is a scaled-down form of teaching, in which a stu-

dent teaches a small group of four or five pupils for five to twenty minutes. Dwight Allen and Kevin Ryan state five essential propositions about microteaching:

First, microteaching is real teaching. Although the teaching situation is a constructed one in the sense that teacher and students work together in a practice situation, nevertheless, bona fide teaching does take place.

Second, microteaching lessens the complexities of normal classroom teaching. Class size, scope of content and time are all reduced.

Third, microteaching focuses on training for the accomplishment of specific tasks. These tasks may be the practice of instructional skills, the practice of techniques of teaching, the mastery of certain curricular materials, or the demonstration of teaching methods.

Fourth, microteaching allows for the increased control of practice. In the practice setting of microteaching, the rituals of time, students, methods of feedback and supervision, and many other factors can be manipulated. As a result, a high degree of control can be built into the training program.

Fifth, microteaching greatly expands the normal knowledge-of-results or feedback dimension in teaching. Immediately after teaching a brief micro-lesson, the trainee engages in a critique of his performance. To give him maximum insight into his performance, several sources of feedback are at his disposal. With the guidance of a supervisor or colleague, he analyzes aspects of his own performance in light of his goals. The trainee and the supervisor go over student response forms that are designed to elicit student reactions to specific aspects of his teaching. When the supervisor has videotape available, he can use videotape playbacks to help show the teacher how he performs and how he can improve. All this feedback can be immediately translated into practice when the trainee re-teaches shortly after the critique conference. (2, 2-3).

The user may choose from many models of microteaching. Most models usually consist of the following cycle: 1) Teach; 2) Critique (by the micro-pupils, peers, and/or supervisor); 3) Preparation

of materials for re-teach session; and 4) Reteach.

This writer believes that the inclusion of microteaching in the pre-service training of teachers provides a way to strengthen the quality of the student teaching experience. Microteaching can reduce some of the anxiety experienced in student teaching by preparing and implementing a lesson to offer experience, and further, by having successful experiences with small groups of real pupils. Microteaching can help the teacher trainee to realize the difficulties of teaching through exposure to pupils of varying abilities and by allowing him the opportunity to prepare various materials for use in direct experiences. It can help the teacher to change some of his behavior prior to student teaching by receiving feedback from the pupils, peers, supervisor, and the "mirror image" through the use of the videotape recorder. This type of direct training can also lead to a more fruitful experience during student teaching.

In the past, it has been difficult to include microteaching in the training program due to certain contingencies, such as: student schedules, availability of pupils who are willing to come to the campus for microteaching sessions at irregular hours, inadequate facilities on the campus for a teaching center with equipment and supplies, and above all, the necessary funds to finance additional staff and to reimburse the micro-pupils for their time. Most microteaching programs occur during the early evening hours, (i. e., from six until nine o'clock), or during summer training programs, for example at Stanford University. Since the public schools have an essential role

in the training of teachers, it seems appropriate that the schools should be the locus of some of the pre-student teaching experiences by providing pupils and classroom space. A part of this study will describe a microteaching sequence in foreign languages, that took place in a public school during school hours, as an integral part of the foreign language methods course. It further concerns itself with the feasibility of including microteaching as a permanent part of the pre-service training of foreign language teachers.

What is Interaction Analysis?

"Interaction analysis is a system for describing and analyzing teacher-pupil verbal interaction," (32, 200). Originally devised by Ned Flanders in 1955, this particular system has ten categories -- seven for teacher talk, two for student talk, and one for silence or confusion. Since then, numerous other coding systems have been developed such as VICS, OScAR, FLint, and MACI. The Flanders system was chosen for use in this study.

Interaction analysis systems have been used for research purposes in many facets of teacher education, to study the relationship between teaching style and pupil achievement, and in supervision. "Prior to the 1960's, almost all research on 'effective teaching' concentrated on links between characteristics of teachers or of teaching settings (input) and various kinds of pupil growth (output)," (30, 16-17). Interaction analysis systems show, then, what teachers "do" in the classroom and not what they "have" or what they "are".

This writer believes that pre-service teachers need an awareness

of their verbal behavior and its effect upon their pupils. This awareness can be achieved by using Flanders' system of interaction analysis. Certain modifications of the system are made to allow for the uniqueness of foreign language teaching and learning.

Usually the pre-service teacher at the Ohio State University has been exposed to interaction analysis in an introductory Education course. This exposure has been general and not especially relevant to foreign language teaching. In the context of this study, training in interaction analysis will be given to those about to enter student teaching by one who is familiar with foreign language teaching.

The Problem

The preparation of pre-service foreign language teachers is the focus of this study. In these times of educational change in teacher preparation, restricting the program to the use of campus classrooms is an outmoded idea. Continued implementation of this idea will only increase criticism of the teacher education program and will further maintain a high level of anxiety, which students evidence prior to student teaching. New models of teacher training must be found so that students can receive more direct experiences earlier in the training than the usual student teaching, which takes place in or near the final quarter of the senior year. Increased direct experience at an earlier time would permit more effective screening, more awareness of individual strengths and weaknesses, and a greater possibility of effecting change well before the student teaching experience. During the student teaching experience, the college supervisor could devote

more time to correcting individual weaknesses of student teachers, and to improving language skills. The latter has usually been slighted, due to the preoccupation of trying to change behavior and to developing more effective teaching techniques.

The problem, as researched by this study, is this: Does training in microteaching and Flanders' system of interaction analysis enhance a prospective teacher's classroom sensitivity, make him more indirect in his verbal behavior, give him a more positive attitude toward teaching, and make him a more skilled teacher than one who has not received this training?

In summary, the purpose of this study is to ascertain whether microteaching and interaction analysis, together, are significant factors in the training of pre-service foreign language teachers, and to determine the feasibility of including such training as a permanent feature in foreign language teacher preparation.

Research Questions

As a feasibility study, answers were sought to the following questions:

1. Will pre-service teachers, who have received training in microteaching, have a more positive attitude toward teaching, as measured by a higher score on the Teaching Situation Reaction Test (TSRT) than those who have not received such training?
2. Do pre-service teachers, who have received early direct experiences report less anxiety prior to student teaching than those who have not received such training?
3. Do pre-service teachers, who have received early direct experiences, report higher confidence in their

ability to teach Spanish than those who have not received such training?

4. How will students from Group I, that group receiving direct experiences, and Group II, that group receiving the standard methods course, rate the value of their methods course, Education 540-B, compared to other Education courses?
5. How will students from Groups I and II rate the value of the topics covered in their section of Education 540-B?
6. Do pre-service teachers, who have received early direct experience, have a better understanding, as measured by an Attitude Survey, of the purposes of the dialog, of pattern drills, of abstract words, of grammar generalizations, and lesson plans than those who have not received such training?
7. Are pre-service teachers, who have received early direct experiences, better able, as measured by an Attitude Survey, to adapt or supplement materials for the teaching of the dialog, pattern-drills, abstract words, grammar generalizations, and writing lesson plans than those who have not received such training?
8. Are pre-service teachers, who have received early direct experiences, better able, as measured by an Attitude Survey, to determine when the dialog, pattern drill, abstract words, or grammar generalization have been learned than those who have not received such training?
9. Do pre-service teachers, who have received early direct experiences have different expectations of pupil ability, as measured by an Attitude Survey, than teachers who have not received such training?
10. Do pre-service teachers, who have received early direct experiences, perform better during student teaching, as measured by the Performance Centered Criteria (PCC), than those who have not received such training?
11. Do student teachers, who have been trained in interaction analysis have higher indirect verbal patterns than those student teachers, who have not received such training?

12. Do the pupils of teachers who have been trained in the use of interaction analysis have a more positive attitude toward foreign languages, as measured by the Foreign Language Attitude Questionnaire (FLAQ) than the pupils of those teachers who have not received such training?
13. Do student teachers, who have been trained in interaction analysis have less positive attitudes toward their co-operating teachers, as measured by the Student Teacher Attitude Questionnaire (STAQ) than those student teachers who have not received such training?

Design and Procedures

The students in this feasibility study were selected from a Spanish methods course during the Fall Quarter, 1969, at the Ohio State University, and were randomly assigned to two groups. Group I received the early direct experiences -- microteaching for two weeks and team teaching for three days in a public school as an integral part of the Spanish methods course. Group II experienced only the standard Spanish methods course.

During the Winter or Spring Quarters of the student teaching experience, the students of Group I received about ten hours of interaction analysis training, with the investigator using the Flanders' system adapted to foreign language teaching. Each member of Group I, who participated in this training, met with the writer for four one-hour sessions, and listened to and coded simulated classroom situations as a follow-up to the sessions.

Each student teacher from Groups I and II, who taught in the Winter or Spring Quarters, was videotaped twice, for thirty minutes each time. Interaction Analysis codings were taken from the audio portion of the videotapes. Classroom teaching performance was based on the

first taping. The administration of several instruments is an attempt to answer the above research questions.

Format of the Report

A review of the literature in the fields of microteaching and interaction analysis is presented in Chapter II, with a review of some microteaching models in foreign language at different teacher training institutions, and a model for using microteaching and interaction analysis together. The complete methodology for this study is to be found in Chapter III. Chapter IV presents and discusses the results. Chapter V contains the conclusions and implications for change in the pre-service education of foreign language teachers.

CHAPTER II

REVIEW AND ANALYSIS OF RELATED LITERATURE

This chapter will be concerned with the related literature of microteaching and interaction analysis which is appropriate to the study. Thus, the review is not exhaustive, but it deals with the major significant contributions of the two fields.

This chapter will be divided into four sections: microteaching, interaction analysis, two models of microteaching, and a model applying interaction analysis and microteaching for a new type of supervision.

A. MICROTEACHING

Microteaching, as a procedure in teacher education, was developed under a precise definition and format by professors Robert Bush and Dwight Allen in 1963 at Stanford University. Although the basic procedure has been used for decades, this precise version is new and it has been widely copied and adapted during the past several years. Microteaching lends itself readily to modifications; therefore, many adaptations are to be found depending on the needs of the institution planning to incorporate microteaching into its training program.

Microteaching at Stanford University

The original microteaching sequence at Stanford was provided during the initial summer sessions for post-degree students, who would be involved in an internship in nearby high schools during the following

school year.

The result of the first microteaching sequence showed that the trainees from the experimental (microteaching) group achieved a higher level of teaching competence ($p .01$) than the control group. The control group spent twenty to twenty-five hours per week in summer student teaching while the experimental group spent ten hours per week in microteaching. The training lasted for eight weeks for both groups.

Participant acceptance of the microteaching experience was very high. Of the forty-seven interns who had received microteaching training 89 per cent, in response to a questionnaire, rated microteaching as "quite valuable" experience. After the intern experience ($n = 23$) 74 per cent of the interns rated the microteaching experience as "quite valuable". (The word "quite" probably is used colloquially to mean "very".)

Microteaching was also used at Stanford University to predict subsequent classroom performance. Grades of A and B in student teaching were regarded as successful. The predictive relationship between microteaching scores and student teaching yielded a chi-square probability of $.001$, (24, 1-12). Thus the summer teaching was dropped in favor of microteaching.

Microteaching also seems to be as effective as student teaching. Kallenbach reported that "A first major finding in the Stanford Program was that there were no significant differences in judged teacher competence between randomly selected secondary intern teaching candidates ($n = 30$) who had had summer student teaching and those who had participated in the microteaching program on campus," (20, 15). In

work that he did at San Jose State College, Kallenbach found similar results, viz, no significant differences between micro-teachers and student teachers during the summer program. But, student teachers were significantly better ($p=.05$) to begin with. Microteaching seems to be an equalizer. He further found that microteaching only needs one-fifth of the time that student teaching does. (People who are familiar with such summer programs are usually not impressed with them. Professor Robert Politzer of Stanford University expressed, to this writer, that the summer intern microteaching program was artificial and that under these conditions, it was impossible to build on the existing knowledge of the pupils.)

Microteaching at Brigham Young University

The use of microteaching at Brigham Young University differs slightly from the Stanford University summer intern program. Their microteaching sessions are held both during the summer and during the normal school year with undergraduates. When possible, pupils from the local schools are used for the sessions. When these pupils are unavailable, peers from the college classes are used. Dwayne Belt lists the reasons for this:

1. Observing others teach and discussing their performance broadens the experience of the observer and therefore lessens the number of actual presentations required by each trainee to alter his own teaching behavior.
2. Use of the trainees as observers expands the evaluation process and sensitizes each trainee to assess his own teaching behavior more critically.

3. Having a group observe the lesson presentation usually results in a variety of creative approaches for presenting similar lessons or concepts, (16, 1-2).

As in the Stanford University study, microteaching was very highly accepted at Brigham Young University as being beneficial. Ninety-six per cent felt they benefited by it.

Belt lists several conclusions that were appropriate to the Brigham Young University microteaching experience:

1. Microteaching, with its provision for immediate feedback and for self-observation by students offers a unique opportunity for individualized instruction of teacher trainees.
2. Microteaching is valuable in introducing the trainee to different types of classroom situations or problems. Segments of classroom interaction can be taped elsewhere or difficulties can be "staged" by the pupils of the miniature class. As his areas of weakness are identified . . . the trainee gains confidence and skill in handling these situations effectively.
3. . . . The use of videotapes in microteaching enables the trainee to see himself as he interacts with a group of students and to arrive at some conclusions in regard to his effectiveness in the teaching situation.
4. Trainees agree that comments and suggestions made by their fellow student teachers are definitely valuable.
5. Performance of students, as judged by supervisors, classmates, and the pupils they teach, is usually improved -- sometimes to a great extent -- following the evaluation session and videotape playback. (16, 4-5).

Although these are the conclusions reached by Belt, only numbers one, four, and five are inherently the result of the precise use of microteaching. (It is important to point out that in number five above the microteachers received feedback from the pupils they taught.) Conclu-

sions two and three are the result of the videotape recorder.

Future research efforts in microteaching at Brigham Young University will be centered on the following areas:

1. Involving the class in the lesson.
2. Asking questions.
3. Classroom management.
4. Providing contact with the referent or appropriate vicarious experience.

Brigham Young University has also been attempting to include microteaching on a large-scale basis, i. e., for all Education majors.

Presently every pre-service candidate teaches at least one micro-lesson using three to four classmates as micro-students. He arranges for a thirty minute session. Due to the large number of students there is usually no re-teach. Each micro-teacher has to meet instructional objectives such as "Minimal performance shall require that seventy-five per cent of the students taught shall have achieved the teacher's objective, and that students shall be caused to function at least once above the lowest cognitive level," (22, 2).

Student evaluation of this requirement rates very favorably with previous Brigham Young University microteaching and that of Stanford University. Eighty-seven per cent of the students in Education 301 rated microteaching as "Excellent," while "Writing Behavioral Objectives," and "Use of Referent," each received thirty-seven per cent. Additional feedback from the participants showed that seventy-six per cent involved had their self-image as a teacher changed either "Very True" (thirty-five per cent) or "Somewhat True" (forty-one per cent).

Ninety-seven per cent indicated that microteaching caused them to see areas in need of improvement, "Very True" (eighty-eight per cent) and "Somewhat True" (nine per cent). It is difficult to ascertain whether these results were the product of microteaching alone or whether the videotape recorder had an influence on them.

Borg, writing about other findings of microteaching, says that, "Research evidence indicates that skills learned in the microteaching format transfer to a significant degree to the teacher's behavior in his regular classroom and persist with little or no regression for a period of several months," (17, 4).

In reviewing research by Dwight Allen, Borg quotes, "There is also some evidence to indicate that microteaching achieves changes in teacher behavior much more rapidly than student teaching or intern teaching," (17, 4).

Microteaching at University of Maryland and Johns Hopkins University

Young and Young are doing research in microteaching that is similar to the study at hand.

Pre-service students at the University of Maryland and interns at Johns Hopkins University teach micro-lessons in private and public schools of Baltimore City and County. Micro-pupils are obtained from study halls, released time activities, and in some cases, classes. (No indication was given whether the microteaching was related to the course of study of the pupils involved.)

Preliminary reports of interns who received microteaching versus those whose training began in the classroom indicate that micro-teach-

ers had more "total Reinforcement" (.005), had more "Different Reinforcements" (.005), were better at "Establishing Orientation to the Task" (.0005) and were also better at "Probing" and "Closure" (.005 and .01), (23,10). The microteaching group received instructional sessions over these areas in pre-microteaching seminars.

On Hough's Verbal Interaction Scale there was no significant difference, except the microteaching group reached $t = .10$ on the Revised Indirect/Direct Ratio. No group was given training in the use of the verbal system, (23, 11).

Microteaching and Relevance to Course Work

Two writers discuss microteaching as it is relevant to course work.

Gilliom, of the Ohio State University, includes microteaching as a part of his social studies methods course, as this study attempts to do. He indicts the undergraduate pre-service training for failure to "tell it like it is." For him, microteaching is a means "to come to grips with this confrontation gap and to add a note of realism to the study of social studies methods," (34, 165).

Adrian Van Modfrans used microteaching at Purdue University in an Educational Psychology course. She divided the course into five groups, four control and one microteaching. The microteaching group found 80 per cent of the material learned in the course to be relevant to teaching, while the four control groups made ratings ranging from ten to forty per cent. It was concluded that a microteaching experience of the nature used is an important adjunct to the Educational

Psychology course. "Students tend to perceive such an experience as valuable and relevant to their teaching goals," (21, 8).

Microteaching and Self-Supervision

The following schema is indirectly related to the study at hand. Donald Johnston had microteachers teach twenty minute sessions which were videotaped with no one present but micro-pupils and the micro-teacher. One group of micro-teachers received training in the Flanders System of interaction analysis, while the control group had no such training. After the microteaching sessions the experimental group viewed a videotape for thirty minutes, with no supervisor, using the Flanders System of interaction analysis. The control group viewed tapes of their teaching with the supervisor and received "traditional" supervision. Each group was administered the Minnesota Teacher Attitude Inventory (MTAI). The result showed that:

1. Self-supervision tends to promote indirect teaching.
2. Self-supervision tends to promote higher scores on the MTAI. (18, 6).

B. INTERACTION ANALYSIS

Interaction analysis is a system formulated by Ned Flanders in 1955, which attempts to code the verbal interaction between student and teacher. Since Flanders, there have been numerous verbal coding systems devised; but this study will refer to the Flanders System, modified by Gertrude Moskowitz, as it applies to foreign language teaching. It is within the last four years that the use of interaction analysis has become widespread and thus the review of the litera-

ture will be limited, for the most part, to those studies which have relevance to this report from those years. Since there is a plethora of literature in this area, and it would be impossible to review it here, the reader is encouraged to peruse the collection of articles compiled by Amidon and Hough (see bibliography), and the journal of the AERA for the years 1968 and 1969.

Interaction Analysis-related Research and Literature

A study by Amidon shows that student teachers, as a general group were found to become more indirect, accept more student ideas, and criticize less after training in Flanders System than the subjects not trained, (25, 44-56).

Interaction Analysis and Student Teachers

Training in interaction analysis varies from study to study. Hough and Ober found that ten hours of training was adequate to train pre-service teachers to show conditions of empathy and congruence, (3, 330). This finding is in relation to Carl Roger's theory that student learning is enhanced by teachers who are congruent, and are expressing unconditional positive regard and empathy to their students.

Hough and Ober also found that encouragement and praise result in higher student achievement in junior high school social studies and mathematics, and the pupils have a more positive attitude.

Gertrude Moskowitz gave her student teachers thirty hours of training. She reports that student teachers trained in interaction analysis praised more, and communicated less dissatisfaction. The student teachers also appeared to have more positive attitudes toward

teaching and more indirect teaching patterns. They used less direct and extended direct influence and had more extended praise, (36).

William Hill, in a doctoral dissertation, trained in-service teachers for six, eight, and ten hours and found that ten hours was somewhat superior to the other two, (37).

Jeffery Kirk taught his elementary student teachers interaction analysis for five fifty minute sessions and six individual conferences. The total training time was about twelve hours, (3).

Timing of Interaction Analysis Training

One would wonder when the interaction analysis training should take place. Norma Furst used three groups to try to ascertain this, two experimental groups (one which received training prior to student teaching and the other during student teaching), and one control group. She found that timing of the interaction analysis training seems to have no effect on behavior differences of accepting behavior and questioning.

However, according to Furst, there was a difference on two dimensions -- total pupil talk and pupil response talk -- with student teachers trained during student teaching ranking higher than those trained prior to the experience or those without training, (33).

Interaction Analysis and Attitudes toward Teaching

Several studies point out consistently that teachers trained in interaction analysis have more positive attitudes toward teaching. This is supported in the findings by Furst, (33), Zahn, (40), Mosko-

witz, (36), Ober, (39), and Hough and Ober, (3). However, Kirk and Amidon found no significant difference on this variable under pre- and post-test conditions, i. e., there was no significant difference in the attitude of student teachers toward teaching, (35).

Interaction Analysis and Indirect/Direct Ratios

The research in this area also consistently shows that teachers trained in interaction analysis are less direct and more indirect.

Furst's student teachers had more total pupil talk and more pupil response talk (less teacher talk, thus less direct) than those in the control group. The experimental groups also had more teacher acceptance of student ideas, (33).

Kirk and Amidon found that the interaction analysis trained group talked less, gave fewer directions, and asked more questions after pupil comments than the control group, (35).

Ernest Lohman, using a revised Flanders System with thirteen categories, found that his student teachers used less direct teacher talk, gave fewer directions, used more indirect teacher talk, and accepted and clarified ideas to a greater extent than those student teachers not trained with the revised Flanders System, (38).

Student Teachers Reaction to Interaction Analysis Training

The most effective training one can give to a student teacher is of no value unless the one receiving the training feels it is valuable.

Edmund Amidon and Anita Simon report the following general statement of student teachers' reactions to interaction analysis training: "Student teachers feel that interaction analysis is significant be-

cause it helps make operational much of what they have already learned about educational methods and theory. Students also appear to think that they have gained insight into their teaching behavior and that this insight will make it possible for them to adjust their behavior to various types of teaching situations," (15, 5-6).

Although originally designed as a research tool, interaction analysis has given applications to the teaching-learning process, especially the early study by Ned Flanders in the teaching of geometry where the pupils of teachers trained in interaction analysis achieved significantly higher than the pupils of non-interaction analysis trained teachers, and the Hough-Ober study showing higher pupil achievement in junior high school social studies and mathematics of teachers who received interaction analysis training. Hough-Ober's finding that ten hours of interaction analysis training is sufficient to train pre-service teachers to show conditions of empathy and congruence is important to the teaching-learning process. This supports Rogers' theory that learning is enhanced by such teacher behavior, (3).

The above-cited studies of Amidon, Hough-Ober, Flanders, Moskowitz, and Lohman would seem to support the inclusion of interaction analysis somewhere in the pre-service program. The study at hand attempts, in part, to ascertain the feasibility of including interaction analysis in the pre-service preparation of foreign language teachers.

C. TWO MODELS OF MICROTEACHING IN FOREIGN LANGUAGES

I. Stanford University Summer Intern Program

The Stanford University summer intern program for foreign language

teachers prepares post-degree students for internships in nearby high schools during the following school year. Since the program is constantly being revised, it is difficult to describe a model which characterizes this program adequately. However, the original microteaching format and the present one (1969-70) will be described.

Original Format

The original format started with 1) a five minute teach, followed by 2) immediate student evaluation, and 3) reteach, upon option of the advisor.

The problem with this format was, as expressed by Professor Robert Politzer, "the extreme artificiality and the impossibility of providing any teaching situation which could build meaningfully on the existing knowledge of the pupils." (Letter written to the writer on February 26, 1970.)

Present Format

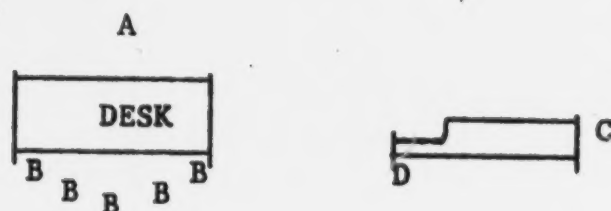
The present format is a continuous micro-class in which candidates take turns teaching specific topics (five to ten minutes at a time depending on the kind of "closure" they want to achieve). The entire micro-class session (forty-five to fifty minutes) is videotaped and the critique follows.

Physical Arrangements

There are no fixed physical arrangements although it is preferred to have the camera at a diagonal position, which makes it possible to videotape the teaching performance as well as the student reaction.

Schematic drawing of the physical arrangements:

Legend: A = the micro-teacher
 B = the micro-class
 C = the camera
 D = the advisor



II. Microteaching in Foreign Languages at Brigham Young University

At Brigham Young University, the language departments require a "Skills Practice" session prior to the microteaching with an actual class. The methods instructor demonstrates the techniques of a specific teaching skill (teaching a dialog, conducting a pattern drill, making a grammar presentation, etc.), then gives the students the assignment to prepare a presentation in order to practice the skill he demonstrated. This presentation is made to the class, at which time it is videotaped. The other class members write down comments and criticisms during the presentation, so that both the instructor and students can make comments during the playback period, stopping the videotape recorder as necessary. The instructor gives the micro-teacher a grade on the presentation, his own written evaluation, plus the copies of the other students' comments.

After the students have practiced the skills, they are assigned to do microteaching with an actual class. If the micro-class meets at an hour other than the methods course, the micro-session is videotaped and the tape is played back for criticism and comment during the

methods class. When the micro-session meets at the same hour as the methods course, closed-circuit equipment is used. The language class is held in a room near the methods classroom. In this way, the micro-teacher, the micro-pupils, and the cameraman are the only persons in the classroom; the methods instructor and the methods class students are in another room, watching the presentation. This arrangement allows the methods teacher and students to comment on the presentation while it is actually going on. In addition, it keeps all observers out of the actual classroom. A videotape is made of the presentation so that the micro-teacher can play it back and be critiqued by the methods instructor at a later time.

This procedure is used with all the basic techniques of language teaching. The micro-teachers are critiqued by both the methods instructor and their peers. Brigham Young University has experimented with and is negotiating the purchase of a two-camera mixer console, which would allow the simultaneous presentation of two images on the monitor, in order to view both the micro-teacher and the micro-class.

D. AMIDON'S MODEL OF MICROTEACHING AND INTERACTION ANALYSIS

Amidon (32) has recently attempted to combine microteaching and interaction analysis to illustrate a new mode of supervision in which the micro-teacher plots the objectives to be covered, teaches, receives feedback, and determines whether the lesson was successful.

Amidon refers to this procedure as the Skill Development in Teaching model (SKIT). It has five steps:

1. Selection of the appropriate objectives.

2. The skill session.
3. Data collection.
4. Feedback.
5. Practice or re-teach.

He modifies the Flanders' ten categories by adding twenty-nine sub-headings such as the following:

- Category 1 -- Acceptance of student feelings.
- a. Acknowledgement -- recognizes student feelings.
 - b. Clarification -- relates expressed feelings to probable cause.
 - r. Reference -- compares expressed feelings to feelings of others or the teacher.

In the skill sessions, (microteaching) the student teaches a micro-lesson that includes the following specifications:

1. A simple content objective that can be achieved in about five minutes and that would also be appropriate to asking different types of questions.
2. Five students to participate in the skill session. This number may vary but should be no greater than ten. The students can be children or other college students playing pupil roles.
3. Two each, of four types of questions: F - factual, C - convergent, D - divergent, E - evaluative questions.
4. If (3) above is not accomplished, the microteaching will be repeated. (32, 210-211).

The third phase is data collection using the interaction analysis system, and audio- or video-tape recorders. The latter is extremely good for recording non-verbal behavior. Student reactions to teacher behavior can also be recorded.

Phase four, feedback, compares the data (3) to the objective (1). Amidon believes this method has the advantage of not telling a micro-

teacher that he has failed. The micro-teacher tells himself that he has failed.

The last phase is the practice or re-teach session, if the micro-teaching is not successful.

The advantages of microteaching and interaction analysis, as reported are:

- The use of categories makes teaching objectives easily definable.

- Second, using categories with operationally agreed upon definitions improves communication by providing a common language for supervisors to use when discussing teaching.

- Third, the observation of the supervisor is more reliable than in the case of unstructured observation.

- Fourth, the teacher's observational skill is increased so that he has a new tool for learning.

- And, fifth, because the supervisor no longer needs to evaluate the teaching session, the relationship between teacher and supervisor should be improved. (32, 212).

Application of Amidon's model in the foreign language teacher education program will be developed in Chapter V, when recommendations for change are made.

CHAPTER III

METHODOLOGY

This study was designed to determine the feasibility of including microteaching and interaction analysis as an integral part of foreign language teacher preparation. The study was carried out within the settings of a methods course for Spanish teachers, the public schools, and student teaching.

In brief, this study attempted to determine the effect of direct experiences during a methods course upon student teaching performance during the student teaching experience. Data was collected in order to ascertain the effects of direct experience and to discover some of the problems inherent in any change.

The study also attempted to ascertain the feasibility of including interaction analysis in terms of trainer and trainee time; the effect of such training on student teachers' attitudes toward teaching and their co-operating teacher; and the effect of this training on pupil attitudes toward foreign languages.

RESEARCH DESIGN

Selection of Sample

The students, who participated in this study, were selected from Education 540-B, a methods course for Spanish teachers, offered during the Fall Quarter at the Ohio State University. Initially, there were twenty-one students. They were randomly assigned to one of two groups,

Group I, that group which received the direct experience and interaction analysis training, and Group II, that group which received the standard methods course. As a result of the random assignment to groups, there were ten students in Group I and eleven students in Group II. One student dropped from Group II due to language difficulties leaving $N = 10$ in each group. This random assignment was done the first class meeting by drawing the student's name from a box.

Experimental Design

The research design chosen for the study was the Pre-test -- Post-test Control Group, as discussed by Campbell and Stanley (27), and has the following graphic description:

$$R \quad O_1 \quad X \quad O_2$$

$$R \quad O_3 \quad O_4$$

where: R = randomization of the groups, O_1 and O_3 = the pre-tests, O_2 and O_4 = the post-tests, and X = the treatment (direct experiences) given to Group I.

This particular design controls for all sources of Internal Validity, but lacks strength for External Validity. However, due to one type of test which was used and the nature of the treatment, X , there was probably very little interaction of the test, the Teaching Situation Reaction Test (TSRT), with X allowing for at least one control for External Validity. With the other tests used, there was probably some interaction of the test with X allowing for limited interpretation.

Although this was a feasibility study, every attempt was made to

prevent the "Hawthorne effect". The students were simply told that, at that time, it was impossible for all of them to do microteaching in the school and that dividing the course into two sections was essential.

The choice of the pre-test -- post-test control design for the methods course was necessary for this study to determine the effect direct experience has on certain aspects of foreign language teaching.

PROCEDURE

The study consisted of four major phases: Preparation and organization of plans, Development of instruments, Execution of the experiment, and Analysis of the data. Analysis of the data is presented in Chapter IV.

In phase three of the study, the pre-service teachers became involved. This phase was divided into two steps: Step A, the methods course during the Fall Quarter, and Step B, the student teaching experience.

Preparation and Organization of Plans

During the summer prior to the study, initial, tentative permission to conduct microteaching in the selected school was obtained from the vice-principal responsible for instruction and the co-operating teacher who would provide lesson content and instructional objectives. She was also responsible for assigning pupils to the micro-sessions.

The idea for the study resulted from a seminar on innovation in foreign language teaching and was funded by the Graduate School of the Ohio State University. Support for the investigation for a period of

twelve months and funds to purchase videotape for phase two of the study were provided.

Prior to the commencement of the Fall Quarter, the writer, who taught Group II, met several times with the instructor of Group I, to determine course content and commonality of objectives prior to the microteaching experience. Ideas and materials were shared to insure this objective. The instructor of Group I was a teaching associate in the department of Humanities Education, who was the regularly assigned instructor for Education 540-B. Teaching philosophy and teaching experience were comparable to the writer's.

Commonality of objectives

It was an important part of the procedure that each group of the methods course covered the same topics for the first five weeks of the course prior to Group I doing microteaching. The topics agreed upon and covered by the two instructors follow.

Topics covered and examples

1. Teaching of Vocabulary
 - a. abstract words -- these words were demonstrated by the instructor and suggestions for teaching vocabulary were given. For example, the instructor taught the abstract word tambien, which means "too" or "also". To not give away the meaning of the word, a nonsense syllable was given in lieu of tambien. The students then guessed the meaning of the word to see if the teaching was clear. The students were assigned an abstract word to teach, substituting a nonsense syllable for the word. Effectiveness was measured by the ability of the class to guess the word.
 - b. concrete nouns -- these were demonstrated but not taught since a simple visual would suffice for this.

2. **Teaching the Dialog**
Each instructor demonstrated the teaching of the dialog and each student was assigned, and taught a dialog to his peers. Techniques, such as modeling the line, using visuals, and completion exercise, were given.
3. **Teaching of Structure**
Each instructor taught a grammar point to the class. Techniques for teaching grammar using visuals and procedures for efficient presentation were given. Each student was assigned a grammar point common to first year Spanish to teach to his peers.
4. **Pattern Practice**
This was presented as the logical sequence to the above. Different types of drills and their purposes were discussed. The students prepared pattern drills on grammar points and also expanded drills found in their text book. Some of these drills were presented to the class for analysis.
5. **Grammar Generalization**
This topic was presented as the final step in the teaching of grammar. Grammar generalizations are summaries of grammar presentations, which allow the pupil to inductively learn grammar. Several grammar points were generalized for the class. Each student was then assigned the same grammar point he taught in The Teaching of Structure, above, to be generalized before his peers.

Development of Instruments

The Teaching Situation Reaction Test (TSRT)

The TSRT, developed by Dr. James Duncan of the Ohio State University, consists of a series of situations to which a teacher reacts, marking the four responses in order; first, second, third, and fourth, indicating his preference. It consists of forty-eight items, with a total possible score of 288. This instrument measures knowledge about, and attitudes toward teaching through responses to a specific situation. It is available from Dr. Duncan.

The Attitude Survey

The Attitude Survey was developed by the writer in co-operation with Dr. Frank Otto, of the Ohio State University, in order to quantitatively measure the effect of direct experience on pre-service teachers' understanding of 1) the purpose of, 2) how to teach, and 3) the place of dialogs, pattern practice, abstract words, and grammar generalization in an audio-lingual program. It further investigates 1) whether pre-service teachers can determine when learning has taken place, 2) whether they can adopt or supplement materials for teaching dialogs, pattern practice, abstract words, and grammar generalizations. It further attempts to learn whether students have higher expectations of pupil ability prior to direct experiences and lower expectations afterward.

The Attitude Survey consists of twenty-six items, using a fifty point scale. Students check a scale from high to low or low to high. A copy of this scale is in Appendix A.

The Anxiety and Ability Scales

The Anxiety and Ability Scales were designed by this writer in an attempt to measure students' anxiety prior to student teaching and their assessment of their own ability to teach Level I Spanish. It was administered at the completion of the Spanish methods course, Education 540-B. It consists of two items on a semantic differential five point scale.

The additional items on this instrument were an attempt to ascertain how the students perceived the value of their methods course as compared to several other education courses and how the students per-

ceived the value of the topics covered in their methods course. A ranking procedure was applied to these items. A copy of the scales are in Appendix A.

The Foreign Language Attitude Questionnaire (FLAQ)

The FLAQ was developed by Dr. Gertrude Moskowitz, Temple University, and is published by Optical Scanning Corporation. It is an attempt to measure pupil attitudes toward foreign languages. It consists of fifteen items on a semantic differential scale, i. e., a seven point scale. Since the FLAQ was devised for high school pupils, the language is appropriate to that level. Copies are available from Dr. Moskowitz.

An example of an item is:

Learning a foreign language is hard

1	2	3	4	5	6	7
usually			sometimes			rarely

The Student Teacher Attitude Questionnaire (STAQ)

The STAQ was developed by Dr. Gertrude Moskowitz, Temple University. It attempts to measure student teachers' reactions toward the co-operating teacher. It consists of eleven items on a semantic differential scale, i. e., a nine point scale. Copies are available from Dr. Moskowitz.

An example of an item is:

I find my co-operating teacher is:

1	2	3	4	5	6	7	8	9
very hard			as easy to work				very easy to	
to work with			with as most				work with	

The Performance Centered Criteria (PCC)

The PCC was developed by Dr. Robert Politzer, Stanford University, to evaluate teaching performance of foreign language teachers. In its original form, there are eleven criteria; however, for the purposes of this study, only eight of the eleven were used. (The criteria of "Use of Electronic Equipment", "Making Homework Assignments", and "Testing", were not used as these were not observed in any of the videotaped classes of thirty minutes duration.) A "Global Evaluation" was added by the writer to assess the whole teaching performance. This global evaluation was scored from zero to ten -- zero being lowest, five average, and ten superior. See Appendix A for a copy of the PCC.

Execution of the Experiment

Step A. The Methods Course

This section will describe the methods courses on a day-by-day basis. Since each group met separately, the reader can compare the experience of each group.

Day 1

The twenty-one students enrolled in the methods course, Education 540-B met and were randomly assigned to either Group I or Group II. The class time of Group I was changed to 1:00 until 3:00 p. m. on the same days as Group II, in order to fit into the time schedule of the public school where the microteaching took place. The free noon hour allows for travel to the school for the microteaching experience. Group II was to meet Tuesdays and Thursdays from 2:00 until 4:00 p. m.

In the case of those students who could not meet at the 1:00

hour, they were automatically assigned to Group II, taught by the writer. Two students were thus automatically assigned. The remaining students were assigned by the instructor of Group I and the instructor of Group II (this writer) alternately drawing names from a box (randomization without replacement). Group I was composed of nine females and one male; Group II had nine females and two males. One female of Group II later dropped the course.

The students were requested to report to the appropriate session for the next class. Each instructor gave an assignment, his text choice, and room number. Group I used Espanol Moderno, the text which was used at the co-operating high school. Group II was assigned Chapters one and two of Teaching Foreign Languages, by Frank Grittner. A-1M, Level I, second edition was used as a language text for the course. The difference in texts was considered irrelevant, because there was no testing or emphasis on them. They were used as supplements to the lecture/demonstrations.

The remainder of the class time was spent by the instructors interviewing those students who had not been given prior permission to take the course.

Day 2

The Teaching Situation Reaction Test (TSRT) was administered to both groups (one hour). Following the administration of the TSRT, the requirements for the course were indicated for Group I. Further, a description of the microteaching procedures was given with some expectations as to suitable dress, grooming, and behavior for that situa-

tion. It was noted that the final grade for the course was to be based solely on their performance during team teaching the last week of the course.

Group II discussed the readings. The lecture consisted of a brief history of language teaching in the United States as it pertained to the use of the audio-lingual methods. Course expectations were stated and questions answered. Chapter 3 in Grittner was assigned.

Day 3

In both groups, the instructors presented some representative high school Spanish textbooks, (A-IM, Entender y Hablar, Learning Spanish the Modern Way, and El Camino Real). Each class discussed obvious differences of format, exercises, and mode of presenting grammar.

Each instructor demonstrated gestures used in language teaching, i. e., gestures to elicit responses from 1) the entire class (choral), 2) half-class, 3) one row, 4) an individual, 5) "listen", 6) "repeat", 7) "don't repeat". Students were given practice on this.

One further demonstration was presented by each instructor. Backward build-up, a device for memorizing a long sentence by breaking the sentence into meaningful phrases and drilling them from the end, was presented, the purpose was discussed, and time was given for practice on meaningful break-down of sentences into phrases. In each group, examples were chosen from appropriate texts, i. e., Group I used Espanol Moderno, Group II used A-IM, Level I. Every student was assigned one sentence (from the appropriate text) to be presented dur-

ing the next class, and instructed to incorporate gestures to insure class participation.

Group I received two handouts: 1) a glossary of terms used in foreign language teaching, and 2) the preparation of visuals, with the latter being discussed for about ten minutes. Chapter 8 in Nelson Brooks' Language and Language Learning, on long and short range goals of language instruction was assigned. Group II received the glossary of terms handout.

Day 4

Each instructor reviewed the techniques of backward build-up. Group I discussed Brooks while Group II was given similar information in a lecture and discussed the goals of a four year language program for Listening, Speaking, Reading, and Writing.

In each class some of the more salient terms from the glossary of terms were discussed, then each student presented his backward build-up line.

Following a ten minute break, the methods instructors demonstrated the teaching of vocabulary -- abstract and concrete words, and procedures for presenting same, i. e., modeling the word, using it in a context, student repetition, etc. Each student was assigned an abstract word, i. e., nunca (never), tambien (too, also), despues (after), etc., to be presented at the next class session. The students substituted a nonsense syllable in lieu of the Spanish word.

Day 5

Each instructor reviewed the techniques and procedures for teaching vocabulary before each methods student presented his abstract word

using a nonsense syllable for the actual word. The task of the class, in this exercise, was to guess the meaning of the word as a test for clarity of presentation. In each group, the students were videotaped. An appointment was scheduled with each student in order to view his tape and receive in-depth comments about the teaching act. This procedure allow for more in-class demonstration and discussion.

Two terms from the glossary of terms handout, writing and using directed dialog and dialog adaptation, were demonstrated in each class. Each student was assigned dialog lines from his appropriate language text. Twenty questions, based on this material, were to be prepared, dealing with the dialog -- personal questions, structure and vocabulary variations, etc. Further, eight sets of direct dialog, including the question and expected answer, were assigned.

Day 6

Each instructor reviewed the directed dialog and dialog adaptation and the class discussed its value in foreign language teaching. Each student presented his prepared material of the dialog lines.

In demonstrating the teaching of the dialog, each instructor presented the lines using visuals, backward build-up, and a variety of gesturing techniques.

In Group II, a dialog was presented in Spanish as above, then in French. This procedure permitted the students to experience the difficulty of learning a new language -- especially the sound system. It further reinforces the idea that the corpus of material to be learned audio-lingually must be small in amount. The number of syllables per line should be limited to twelve to fourteen, and the number of lines

to be learned should be no more than four. A dialog presented in Spanish would not reinforce this idea since the students already speak Spanish very well. Thus, a dialog in another language reminds the students that language learning is not as easy as it appears in the methods course.

The classes discussed the various techniques of dialog teaching and their purposes. A review of gestures, backward build-up, directed dialog, dialog adaptation, and preparation of visuals was presented as preparation for the next teaching assignment, the dialog. Each student was assigned to teach four lines from his appropriate language text at the next session. Two handouts on presenting the dialog and techniques for teaching the dialog were passed out.

Day 7

In each class, the instructor briefly reviewed the teaching of a dialog and the various techniques. Each methods student was videotaped presenting his assigned dialog and visuals.

Following the break, each instructor demonstrated the teaching of structure (grammar). Visuals and gestures conveyed the meaning without recourse to the use of a grammatical rule. The class discussed the selection of the corpus of material to be taught, the method of presentation, and the variety of techniques at the teacher's disposal. A handout on the teaching of structure, by Robert Politzer, was passed out and briefly discussed.

Each student was assigned a structure point from his appropriate language textbook, Level I in nature, i. e., adjectives, the verbs Ser and Estar (to be), the near future with Ir (to go), etc. Other grammar

points were used by the instructor to initiate class discussion as an aid in organizing students' thinking in presentation of a structure point.

Experience has suggested that an assignment of this nature given on Thursdays seems to offer adequate preparation time for the students, and the opportunity for the instructor to preview the work before its presentation, thereby affording each student a better situation for a successful teaching experience.

Day 8

Each instructor reviewed the structure point he had taught on day seven. The various techniques used in the presentation were discussed. Each student taught his structure point to his peers, and the ensuing class discussion dealt with the effectiveness of the presentations and alternate ways to teach the same point. Since the presentations were videotaped, only brief comments such as, "Hold visuals higher", "Be sure to model the sentence", were made during class. Specific comments about the presentation were made during the private viewing with the student.

Each group received two handouts on pattern drills, and Group II was assigned an additional reading from Grittner, Chapter 8, "The Pattern Drill".

Day 9

In each class, discussion centered on "What is Pattern Practice?", "When is it used?", and "How much of it?" based on the reading handouts.

Each instructor demonstrated the various kinds of pattern drills

used in language teaching. He assigned the students to write some drills in class; some of these were placed on the board for analysis and discussion, others were presented to the class orally by the students. The instructors stressed the importance of giving directions in pattern practice and called attention to the format of the drills. Each student was to expand on several drills found in his Level I textbook.

During the second hour each instructor presented the concept of grammar generalizations (the inductive approach to arriving at grammar rules) through presentation of structure (grammar) points and appropriate questions. Generalizations are of two kinds -- oral and written. They cover the teaching of grammar, or the use of sounds. In generalizing the use of sounds or a grammar point, 1) a teacher questions, 2) a pupil observes or listens, and 3) he (the pupil) arrives at a rule of the language. He is never told the information; he derives it himself.

Because of the confusion and difficulty most methods students experience with this aspect of audio-lingual teaching, due to their own grammar-translation learning, considerable attention is given to this aspect of foreign language teaching. It is extremely important for the students to limit materials and to present appropriate questions to their pupils in order to guide the pupils to an awareness of the grammar point.

Group II was assigned Chapter 6, "The Psychology of Language Learning", in Grittner. Here, Grittner teaches and generalizes a language he calls Modified Esperanto. Students see the concept of

generalization work for themselves as they "learn" a different language.

Day 10

In each group, the concept of pattern drills was reviewed. Students gave examples of various types of drills. Selected students presented their expanded drills from the Level I text orally, demonstrating the directions used.

Following the break, each instructor illustrated several ways of presenting a generalization, e. g., the chalkboard, the overhead projector, and ditto handouts. In Group II, the students worked with the generalization from Grittner, and they found it easy to recall verb endings when the language was presented inductively or by the audio-lingual method; however, they experienced difficulty in remembering the endings of nouns and adjectives when the grammar rule was used and translation drills followed (grammar-translation methods).

An oral or written presentation of the same structure point each student presented on day eight was assigned to each group.

Day 11

Because of the difficulty of the concept of grammar generalizations, the original plans were changed. Group I students completed their oral class presentations, made plans for microteaching, including procedures, teaching times, and car pool arrangements; they also reviewed the earlier course work, relating it to the microteaching experience. They prepared their lessons for the first session of microteaching, based on weekly instructional objectives and lesson plans from the co-operating teacher at the high school. See Appendix B.

The instructor of Group II demonstrated a "sound analogy" in French (most of his students knew no French). He also generalized the two demonstrative pronouns este and ese (showing nearness and farness) using the overhead projector. Some of the students presented their grammar points to the class, which gave feedback on effectiveness of the presentation and suggested ways to improve it. Pages 244 through 251 in Grittner were assigned.

Day 12

Group I was scheduled to begin the microteaching experience in the co-operating high school; however, a breakdown in communication between the school and the Ohio State University Foreign Language Education Department prevented this. Instead, the micro-teachers spent one or two high school periods observing the Spanish I classes of the co-operating teacher. A similar observation would be done by Group II at a later time.

Students in Group II completed the oral presentation of their generalizations. To demonstrate the generalization of Spanish sounds, the instructor chose the letter "c", which has two pronunciations, c = /s/ and c = /k/. He involved the class in a generalization of the letter "g" which has three pronunciations, by having them provide words to fit these three conditions and having them formulate questions which would lead to a rule governing the pronunciation of the letter "g".

After a break, the class reviewed all of the topics they had learned in preparation for the written examination rescheduled for day thirteen.

Day 13

The micro-teachers from Group I began their first day of micro-teaching. The teach--re-teach cycle went well as there was sufficient time for feedback from the pupils and peers. (The schedule of micro-teaching assignments are in Appendix B). Due to circumstances beyond the writer's control, the videotape recorder (VTR) was not used during the microteaching experience, as planned, to provide feedback to the micro-teachers.

Group II wrote a one hour practical examination designed to cover material which would be taught to a typical Level I Spanish class. No theory or factual information based on assigned readings was included. The test consisted of:

1. Preparation of materials for teaching a grammar point from the four line dialog presented in the examination. The grammar point consisted of a contrast between the reflexive and non-reflexive verbs.
2. Preparation of four visuals contrasting four different verbs with an explanation of the techniques used to teach them.
3. Writing a pattern drill which would elicit the various reflexive forms in a person-number pattern drill.
4. Grouping material for a written generalization.

Vocabulary was provided to decrease the time involved in thinking of verbs.

Until this day, the two groups were very similar, but here they began to differ. Group I would experience the innovative microteaching while Group II would complete the standard methods course. An attitude survey was administered to each group. This form, devised by the writer and his advisor, Professor Frank Otto, attempted to compare the

effects of real experience on the teaching and understanding of learning by the pupils to be taught, as well as the ability of the methods students to teach abstract words, structure, dialog, generalizations, and pattern drills (all taught in the methods course) plus one additional topic, lesson planning. (See Appendix A for a copy of the survey.)

To complete the second hour, Group II received an observation sheet for use in noting their observations of the classes they would visit during the following week. (See Appendix C.) They discussed what to look for -- pupil participation, the time devoted to certain activities, etc. The instructor advised the class to take mental notes to avoid upsetting the classroom teacher and to contact the participating school prior to the visit in order to notify the classroom teacher so that the observer's time would not be wasted on a period of written testing, whole period movies, etc.

The assignment for day fourteen was given: "Teacher's Notebook: Reading", Harcourt, Brace and World, Inc., publisher, by George Scherer; Chapter 9, "The Four Skills -- Reading" in Grittner, Teaching Foreign Languages, pages 251 through 271; and A-IM, Level I, page 105, the first reading narrative, for a discussion of how to present a reading passage or narrative for the first time.

Day 14

For Group I, the second day of microteaching seemed to go very well, as the micro-teachers appeared less nervous and more confident. Because the microteaching sessions were based on the co-operating teacher's lesson plans, there was no interruption in the teaching--

learning process, and the micro-pupils appeared to enjoy the sessions, which allowed them extra practice on a relevant topic. (See Appendix B for a copy of a sample lesson plan and typical weekly learning objectives.) This interdependent relationship required careful planning, therefore, the teaching assignments were made for session three of microteaching, (day fifteen). Each student received a copy of the weekly plans and instructional objectives. His microteaching assignments were based on these plans and objectives.

In Group II, the teaching of reading was discussed, relating various ideas from the readings assigned on day thirteen. The instructor demonstrated one method of teaching the reading passage using the overhead projector to review the key elements of the passage. The instructor had written a handout presenting some techniques of teaching reading at Level I stressing meaning, initial sound-symbol correspondence, whole word recognition, etc. The class was assigned to write reading exercises, based on the handout, from their Level I text, and to prepare initial reading exercises for sound-symbol correspondence.

Day 15

The closing of the co-operating high school at 1:00 p. m., which was overlooked by the co-operating teacher in her original plans, cancelled the microteaching for day fifteen. Group I then met on campus for a two hour review of grammar generalizations, a topic which had not been fully developed earlier.

Group II continued its discussion of the teaching of reading, expanding into problems of interference from English and density of new

words in the reading passage (one new word per thirty-five running words). The instructor reviewed the teaching of reading from the first stages. Some of the students presented some of their exercises, using the overhead projector, ditto sheets, and flash cards.

Since the "teaching of meaning" assignment, based on the handout, had been misunderstood, the entire handout was reviewed, emphasizing the teaching of meaning. The former work was reassigned, with a handout on sequential steps in the teaching of reading, based on Brooks (previously mentioned) and Lado's Language Teaching.

Day 16

Group I completed day three of microteaching. There were unexpected complications and interferences in the assigned microteaching area. Also, utilisation of school facilities near Thanksgiving made it impossible to hear the micro-teachers. Thus, the second and third hours were rescheduled for the teachers' lounge area. Due to these and other circumstances, the scope of the study was changed from research with empirical data to a feasibility study.

Group II, with six of its ten members in attendance, reviewed the exercises on reading for meaning. Too often, the reading skill is taken for granted. Therefore, a reading passage was distributed which was written in English, using nonsense syllables for certain verbs, nouns, and adjectives. The class attempted to read the passage by using the context to guess the meaning of the nonsense syllables -- the process of "sensible guessing". This technique reinforced the idea of vocabulary density, which was discussed during day fifteen.

Day 17

Group I completed the fourth and final day of microteaching. Throughout the four days, each student had experience with teaching and re-teaching at least three different activities, i. e., dialog, dialog adaptation or directed dialog, vocabulary, or grammar from the lesson under study. Each micro-teacher taught four times and re-taught four times, totalling eight teaches.

To complete the experience, the successful transition from the micro-situation to the large class was planned in the form of team teaching, to occur the final week of the Fall Quarter. Each student was to teach a fifteen minute segment of the large class for three consecutive days, alternating his teaching time so that he would teach at the beginning, in the middle, and at the end of the class. In the large class setting there was no re-teach cycle nor was there pupil or peer feedback. Each teacher did receive feedback from at least one of the observers.

The students met on Wednesday for an organizational meeting about lesson planning. They received the lesson plans and instructional objectives for the next week and were assigned to one of three teaching teams, two teams with three students and one team with four students, the assignment depending on their university schedule and the high school class sessions. Each team met outside of class to prepare their three days of team teaching attempting to have each member teach at a different time each day, that is, the beginning, middle, or end of the class hour, with no more than fifteen minutes of teaching time each day. The lesson plans were to be approved by the instructor of Group I

on the Friday before the teaching began on Monday or Tuesday. (Both instructors were available for help in planning.) The average direct experience for the microteaching and team teaching was about eighty-five minutes per methods student.

Since the students of Group II requested that the final examination be given the last day of the quarter, to avoid the scheduled testing date, the last day of the final examination week, an understanding was reached on the amount of material to be covered and the nature and length of outside assignments. The remainder of the class time was used for demonstration and discussion.

The instructor demonstrated one method of teaching songs, using contemporary Spanish "hits" rather than the more traditional songs. The class discussion centered on the value of this technique. Other procedures for teaching songs were listed on the handout the students received.

In teaching writing, the instructor presented several methods through handouts by Mary Thompson's "Teacher's Notebook: Writing", Harcourt, Brace and World, Inc., publisher, and by the instructor. In order to demonstrate procedures for giving the dictation, three students were sent to the chalkboard. A review of the procedures allowed the student to make an outline of these procedures.

The writing construction drill, a technique which permits the pupil to construct correct sentences using material provided by the teacher, was used to present two grammar points. The students were given class time to prepare this type of drill on a series of Level I grammar points.

Using the outline presented on day thirteen, (see Appendix C), the class discussed their visitations to the public schools. For example, one student noted that the teacher was very boring and unmotivating. When queried as to why, she stated the teacher used only one teaching activity, constantly used English, and appeared disinterested in what she was doing.

Another student observed the opposite. He saw a class which the pupils seemed to enjoy. The teacher incorporated several teaching activities into the lesson and used different teaching aids such as visuals and the tape recorder. The pupils were grouped in a semi-circle so as to facilitate face-to-face communication. Observations of other students ranged between the two examples cited.

For the discussion of lesson planning, the various activities that could be used in a language class were listed -- some twenty in all. The instructor presented the topic of preparing instructional objectives and discussed how they fit into the lesson plan. He prepared and distributed a handout for foreign language teaching based on Robert Mager's book, Preparing Instructional Objectives, along with two handouts from the Stanislaus County (California) Public Schools, which included a sample lesson plan for a Spanish class, with instructional objectives included.

The above handouts were assigned to be read for the next session, to finish writing activities begun in class, and to read in Grittner, Chapter 11, "Evaluation of the Foreign Language Program", pages 340 through 360, only. A long range assignment for day nineteen was given -- writing a three day lesson plan based on any chapter in A-1M, Level

I after unit five, to include all instructional objectives, materials, and equipment to be used to achieve the objective. A minimal level of performance was also to be included in the objective. They were to assume a forty-five minute period and were to have a minimum of seven activities per day.

Day 18

As mentioned day seventeen, Group I was using this time to prepare for the team teaching.

In Group II, selected students wrote some of their expanded writing drills, an assignment from day seventeen, on the board. The discussion related these exercises to the objectives of Level I, from the first week of the Quarter, and to the Thompson article, a four year plan for the development of the writing skill.

Moving to the dictation as an adjunct to the writing drill, one student was assigned the role of language teacher, given a textbook, and asked to send three students to the board for a dictation in accordance with the presentation given day seventeen. A review and discussion ensued.

In preparation for the long range assignment for day nineteen, the sample lesson plan which incorporated instructional objectives was read. The students were requested to describe the observable behavior that the pupil would exhibit. An effort was made to discourage use of such words as "enjoy", "appreciate", "learn", and to encourage use of words like "writing", "circling", "speaking in correct Spanish", to structure the use of specific terms in writing instructional objectives for lesson plans.

To discuss evaluation of student progress, the instructor presented one handout, using pictures to evaluate the speaking skill and listening discrimination. A second handout the instructor had prepared for use with Unit six of the A-IM, Level I text was used to illustrate how the four skills of Listening, Speaking, Reading, and Writing could be adapted to supplement a textbook. This handout was based on Valette's Modern Language Testing: A Handbook. The assignment to be completed and handed in on day twenty was to write a unit test on any chapter in the text, using a format similar to the one demonstrated by the instructor, or based on ideas from the Valette book. The test was to include three different types of tests for each skill making a total of twelve tests. Five items were the minimum for each test.

Day 19

One team of Group I was in its second day of team teaching while the other two teams began their first day. Due to a conflict of time schedules, which prevented the instructor of Group I attending one of the team sessions, the instructor of Group II participated for him in the evaluation of that team. He made comments on the teaching, as did the instructor of Group I for the other two teams. Each instructor was joined by at least one Ph. D. candidate from the Foreign Language Department to help in the evaluation. A form designed by the department to evaluate student teachers was used. Mean scores were computed for the three days and based on these scores, the students were to receive their grade for the methods course.

To complete the information on evaluation, the instructor, Group

II, demonstrated the use of the mean and standard deviation of a test. A handout was given which explained the procedures and sample problems were worked in class. Because of the mathematical computation involved, this takes longer than one would expect, not to mention the difficulties many students have with anything resembling a mathematical formula. The rationale for such computation was given: it allows the teacher to assign grades fairly, and not by whim.

Another demonstration on how to compute the reliability coefficient of examinations, especially semester and final, was explained. The rationale for this is that it helps to improve instruction by knowing that the tests are "sound" or reliable, i. e., it measures the degree of reliability if it were given again. This was not suggested for quizzes because of their brevity.

Finally, a short presentation was given on computing the difficulty and discrimination per centages with some sample problems worked in class, the rationale that it allows the teacher to know when he has found a good item, i. e., it is neither too easy or difficult, and it discriminates well between the high scorers and the low scorers. A reference was made to the Valette book for further detail on each of these dimensions of evaluation.

Day 20

This was the last teaching day of the Fall Quarter.

Group I finished team teaching, but was requested to attend class on the assigned day of the final examination in order to take the post-tests.

As stated earlier, the students in Group II desired to take the

final examination on this day. The final examination consisted of everything that had been taught and discussed since the first written evaluation, i. e., the teaching of reading, writing, lesson planning, and evaluation. There was no theory from any of the reading handouts or from the methods textbook. It was practical in nature and was taken, basically, from the A-1M, Level I textbook.

As soon as each student finished the examination he was requested to take the post-test of the Teaching Situation Reaction Test (TSRT) and the Attitude Survey. Before leaving, each student handed in his unit tests assigned on day eighteen.

Step B. Student Teaching

Interaction Analysis Training (IA)

Those students from Group I, who were student teaching during the Winter Quarter, were given ten hours of training in Interaction Analysis. Since there were only two students, the investigator met with them individually for four sessions, which totalled a little longer than four hours. Audio-tapes were assigned for outside work to follow up individual sessions. Outside work involved about five and one-half to six hours, totalling ten hours of training.

Each student was given a handout of pages five through sixteen of The Foreign Language Teacher Interacts, by Gertrude Moskowitz (12). While the investigator set up the tape recorder and reviewed for the first session, the students read the handout. The first session was designed to deal with what IA is, its history, and its place in foreign language teaching. It was stressed that IA is not a tool for

rating teaching, but an objective way to codify teacher - student verbal behavior.

A short discussion about the ten categories of the Flanders System of IA, which has six for teacher-talk (indirect/direct), two for student-talk (response and initiation) and one for silence or confusion followed. The investigator played the audio-tape, which accompanies the Moskowitz text, for Session I, pages nineteen through twenty-three, while the student followed from his copy of these pages. As the tape played, the categories and language were clarified. To terminate session one, the student was asked to review the ten categories of IA. His assignment for session two was to memorize the ten categories, to review the audio-tape of Session I, available in the library, and to practice coding audio-tape Session II (pages twenty-six through twenty-eight) and Session III (pages twenty-nine through thirty). Each student was to practice until his coding was correct, a task he could perform since the answers were on the handout and the audio-tape.

In session two, the audio-tape of Sessions II and III was quickly reviewed and recoded. The student was to state his reason for his coding. Before continuing, he was quizzed by being asked to describe the ten categories, selected at random by the investigator, to avoid simple memorization and to prepare him for future, more difficult coding work.

The investigator played examples of four categories, which the student attempted to code. He was assigned to practice Sessions IV and V for session three.

In an attempt to make IA relevant for the student teacher in his own classroom, different activities common to foreign language teaching were discussed, i. e., the warm-up at the beginning of the class, pattern drills, dialog practice, directed dialog and dialog adaptation, reading, or teaching new material. The student was asked to think through the activity, then give the corresponding IA categories. For session three he was asked to plot anticipated categories in his own lesson plans, i. e., for the warm-up he would plot 4-8-(2) or 4-8-(3). (The parenthesis indicates the optional verbal behavior.) For directed dialog he might plot 6-8-10-8-2.

In session three, audio Session V was reviewed; again the student told why he chose the category. Audio Session VI was begun (which was more difficult due to the expansion to eight and ten categories covered at one time. It was felt irrelevant to give practice in IA without attempting to make it useful to the student teacher not only during the student teaching experience but also as a teacher who might wish to code his verbal behavior. Practice in entering the IA matrix and computing per centages was given during the session. For session four he was asked to do matrices for exercises six and seven of Session VI, which contain fourteen and twenty categories respectively.

Session four began by verifying the per centages reached by the student with those of the investigator. Since this was an easy assignment, no further explanation was needed. The investigator then gave a short presentation on computing I/D ratios and i/d ratios, (See Definition of Terms), and the meaning of the results. It was explained that an i/d ratio of 1, 1.5, or 2 meant that the teacher was more

indirect than direct and that he motivated his class by using categories 1, 2, and 3 of the Flanders System. If the i/d ratio dropped to .4, .8, etc., he used verbal behavior of a controlling nature, i. e., categories six and seven of the Flanders System.

The investigator played a videotape of the student teacher's own Spanish class, which had been filmed for use in the IA coding, and for evaluation of his teaching. From it, the student made a matrix and was assisted in interpreting it. This session was the longest and probably the most fruitful for it allowed the student teacher to apply his recent learning to his own situation and to develop insights into his own verbal behavior.

With the conclusion of session four, the student teacher had completed between nine and one-half to ten hours of IA training.

During the Spring Quarter, the same procedures were followed. Of the four student teachers of Group I only two were able to participate in the IA training, due to conflicts of student teaching, working, and other course work.

The Foreign Language Attitude Questionnaire (FLAQ)

The FLAQ was administered to the pupils in one class the student teacher taught, during the first week the student teacher taught. It was re-administered to the same class during the last week he taught.

The Student Teacher Attitude Questionnaire (STAQ)

The STAQ was administered after the student teacher had worked three weeks with his co-operating teacher and was re-administered during the last week of student teaching.

Videotaping of Student Teachers

Each student teacher was videotaped during thirty minutes for each of two tapings. The first taping took place during the third week after the student teacher began teaching (about the fifth week of the Quarter) and during the seventh week of student teaching (about the ninth week of the Quarter). A Sony Shoulder Pak, model DVK 2400, was used for the videotaping.

The videotapes of the eleven students who taught during the Winter and Spring Quarters (six from Group I and five from Group II) were randomly assigned to a viewing format so that the tapes would be distributed between the two groups. This format of eleven thirty minute tapes was the one followed when the tapes were evaluated by the unbiased raters. In this manner, the raters would be unaware to which methods course section the student teacher had been assigned.

Size of the Sample

Of the original group of twenty students, thirteen student taught during the Winter and Spring Quarters. Of these thirteen, eleven were selected for this study for the purpose of the teaching performance variable. Two students were dropped because of the nature of their student teaching assignments: one taught a Level III class, which consisted of the teaching of literature, and the other was assigned to a school with extremely poorly taught Spanish pupils. The class knew virtually no Spanish and, under the conditions present at the school, any attempt to teach Spanish would be in vain.

Of the final N of eleven, six were from Group I and five from Group II. Only four of the six students from Group I received the IA

training. The reason for this was a conflict of teaching, work, and class schedules.

In summary, the final N which was used for teaching performance was eleven. IA training was given to four students. The Student Teacher Attitude Questionnaire was administered to eight student teachers (one student teacher was off campus due to student disturbances at the University) and to eight student teachers on the post-test (one student teacher dropped student teaching as a result of the closing of the University). The Foreign Language Attitude Questionnaire was administered to nine classes on the pre-test and eight on the post-test. (The class of the student teacher who had dropped from the experience was not used in any analysis of the STAQ or the FLAQ.) Of the eight classes used in the FLAQ, four were taught by Group I students and four by Group II students.

Training of Evaluators

A. Interaction Analysis

There were two raters for the IA codings -- the writer and a doctoral candidate in Foreign Language Education at the Ohio State University, who was very familiar with the Flanders System of coding. The raters spent two hours viewing and coding videotapes, and discussing the various ground rules of IA as the need arose on the tapes. Inter-rater reliability was .85, using Scott's method of calculating reliability (6), pages 161 through 166.

B. Evaluation of Teaching Performance

Two unbiased raters were selected for the evaluation of the videotapes. Both were experienced teachers, one a native speaker of

Spanish, who had completed the M. A. in Foreign Language Education at the Ohio State University.

The two raters met with the investigator for two and one-half hours in a preliminary session to discuss the procedures for evaluating the tapes. Each rater was given the Performance Centered Criteria to be used as the guide in evaluating (See Appendix A for a copy). The information relating to each criterion was also distributed and discussed point by point.

This information was then applied to training tapes; these were discussed in light of the criteria by the two raters and the investigator. Positive and negative comments were indicated on the rating sheets. A "Global Evaluation" was given to each training tape. Reasons for the evaluation were discussed as a means to bring the two raters into closer accord.

The next two days were reserved for evaluating the randomly assigned tapes. On day one, five teachers were evaluated and on day two, six were evaluated. Each tape was thirty minutes in duration. The evaluation was divided into two sessions so that the raters would be as fresh as possible for each viewing and to avoid fatigue.

Inter-rater reliability was .73 using a Pearson Product Moment Correlation. This correlation is good, if one considers that the more teachers rated, the higher the reliability between the raters. For example, a difference of two points between the raters accounts for an error of eighteen per cent, using eleven teachers; this error is reduced to ten per cent based on twenty teachers, and five per cent

based on forty teachers. Thus, one can see that reliability increases as the observations increase.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter will report and discuss the results obtained during this feasibility study. Data from the methods courses and data from student teaching will be used to answer the questions posed in Chapter I.

Analysis of Covariance (ANCOV) was used to analyze the results obtained on the Teaching Situation Reaction Test (TSRT) and the Attitude Survey. ANCOV was chosen for analysis of these results of treatment measures due to initial class differences, i. e., it has a factor which adjusts for any differences within each group before computing probability scores. The "t" test was used on the Anxiety and Ability Scales, the IA indirect/direct ratios, the Foreign Language Attitude Questionnaire (FLAQ), and the Student Teacher Attitude Questionnaire (STAQ). The other data from the methods course was subjected to a ranking procedure. The .10 level of significance was used to ascertain whether there were any trends developing as a result of the training.

During the Spring Quarter of this study, the Ohio State University was officially closed for two weeks. As a result, data on two teachers are incomplete.

Data from the Methods Course

1. Will pre-service teachers who have received training in microteaching, have a more positive attitude toward teaching, as measured by a higher score on the Teaching Situation Reaction Test (TSRT) than those who have not received such training?

The TSRT was selected for use in this study because it measures attitudes toward teaching. It was administered twice to each group -- the pre-test during week one and the post-test during week ten of a ten week quarter, thus allowing the use of Analysis of Co-Variance. In this instance, the post-test was the variate and the pre-test was the co-variate.

Group I and Group II each had ten students for both testings. The means and differences are shown in Table 1.

Table 1

Pre- and Post-test Means and Differences -- TSRT

Treatment	Pre-test	Post-test	Difference
Group I	206.00	209.70	+ 3.7
Group II	200.60	204.10	+ 3.5
Difference	5.40	5.60	---

$$t = 1.08; p > .20$$

$$t = 1.25; p > .20$$

Reading Table 1, it is readily apparent that Group I has a mean score greater than five points above Group II for both tests, however, results of the t test indicated that this difference is non-significant ($p > .10$), suggesting that the two groups were indeed selected from the same population. The data were also subjected to ANCOV to ascertain if the difference between the means of the pre- and post-tests were

significant relative to the treatment received by Group I. Table 2 presents these results.

Table 2

Analysis of Co-Variance of the TSRT (N = 20)

Source	SS	DF	MS	F	p
Within Cells	3250.59	17	191.21	--	--
Regression	1904.40	1	1904.40	9.96	.006
p	13.71	1	13.71	0.07	.792

The p of .792 indicates that there was no difference between the groups due to the treatment (microteaching and team teaching).

In discussing these results, there are several factors which must be considered. The students in Group I, who received the direct experiences, totaled eighty minutes each when summing the time spent in microteaching and team teaching, with these two activities separated in time by one week in the campus classroom. Eighty minutes of supervised teaching time is indeed considerable when one thinks about the students who receive no such training. Thus, the TSRT may not have been designed to measure the effects of teaching exposure.

There are other contingencies that may account for the non-significance. One factor deals with the specific situations presented by the TSRT and the locus of the micro- and team teaching experiences. Some of the TSRT situations present problems that are very unlikely to occur in the upper socio-economic suburban high school where the experiences took place. The situations presented by the TSRT may have been as irrelevant to the experiences of Group I as they were to the stu-

dents of Group II who did not have a direct experience. The research on the TSRT has frequently been concerned with IA training, which had been planned for Group I, but, as mentioned earlier, time did not permit its inclusion during the methods course. Since IA training has been shown by other research to increase teachers' sensitivity to pupil feelings -- a strong concomitant of the TSRT -- it was expected that the omission of this variable would have a detrimental effect on the results. It was decided to proceed with the post-testing to consider how direct experiences would affect the results. Without the IA training, the results indicate that there is no significant change in attitude toward teaching.

One final factor may be the instrument itself. The TSRT, as an instrument, may not be sensitive enough to measure attitudes toward teaching as well as it measures knowledge of teaching and the other factors it includes.

2. Do pre-service teachers, who have received early direct experiences report less anxiety prior to student teaching than those who have not received such training?

Because of the "sink-or-swim" syndrome evidenced by many student teachers, this writer was of the opinion that direct experiences would lead to a decrease in the intensity of these feelings. To quantify this data, he presented a questionnaire designed to measure anxiety and teaching ability. The item to measure anxiety asked students to rate the anxiety they feel about student teaching on a five point scale. Table 3 presents the results for the ten students in each methods course who completed the questionnaire.

Table 3
Level of Anxiety Prior to Student Teaching

Treatment	Group I	Group II	Difference
Mean	3.70	4.10	.40

The result of the t test was used to determine if the difference .40, was significant. The test showed no significant difference, although Group I did report a lower mean level of anxiety (3.70) than Group II (4.10), which suggests the trend to be toward decreased anxiety in the group which had direct experience. Because of the small number of students, ($N = 20$), the same form was administered to a French methods course, which was very comparable in content to the course given Group II.

The mean score for the French group was 4.00, as compared to 3.70 for Group I and 4.10 for Group II. Repeating the t test with this larger population, $N = 37$, the results again indicated no difference. One student from Group II, who gave a response of "very low", a score which was greater than three standard deviations below the mean for any group, was eliminated from a second t test. Using $N = 36$ and 34 degrees of freedom, the $t = 2.4$ was significant, $p < .05$.

Using these results, $p < .05$, it becomes increasingly apparent that the direct experience, i. e., microteaching and team teaching, may have decreased the anxiety expressed by students prior to student teaching.

3. Do pre-service teachers, who have received early direct experiences, report higher confidence in their ability to teach Spanish than those who have not received such training?

One additional item on the above mentioned questionnaire asked the methods students to assess their own ability to teach Spanish following the methods course, using a five point scale. The results are presented in Table 4, which shows that Group I students assess their ability to be better than Group II.

Table 4

Ability to Teach Spanish

Treatment	Group I	Group II	Difference
Mean	3.9	3.4	.50

Although a t test did not prove significant, once again the trend appears to be apparent. Students who have had successful direct experiences seem to assess their own ability to teach Spanish as better than those students without direct experiences assess their ability. Many times the students have expressed to the writer, their instructor, and/or supervisor that they feel more confident of their ability to teach Spanish, that the direct experiences were very worthwhile in helping them correct teaching weaknesses. This in itself may be more symptomatic of confidence than any significant difference on the scales.

Once again, the results of the French methods course were included with those from Group II. With $N = 37$ and 35 degrees of freedom, $t = 3.33$, therefore, $p < .01$. Since the difference between the groups was the treatment, one is led to the conclusion that successful direct experience produces students who assess their own

ability to teach a foreign language as better than those students who did not have direct experience assess their ability.

4. How will students from Group I, that group receiving direct experiences, and Group II, that group receiving the standard methods course, rate the value of their methods course, Education 540-B, compared to other Education courses?

Another item in the questionnaire was designed to determine whether Education 540-B would be perceived as more valuable for the students when direct experiences were included than when the course was taught in the standard manner. This item asked both groups to rank the following courses: A Survey of Education (Education 108); An Introduction to Secondary Education (Education 435); History of Education; Philosophy of Education; Other methods courses (courses required for the other teaching area); Educational Psychology; and Education 540-B. Table 5 presents the results.

Table 5
Ranking of Education Courses

Course	Group I							Group II						
	Assigned Ranks					Mean	Comp Rank	Assigned Ranks					Mean	Comp Rank
	1	2	3	4	5			1	2	3	4	5		
108	0	0	0	0	3	5	7	0	0	0	1	2	4.7	7
435	2	5	3	0	0	2.1	2	1	4	2	1	1	2.7	2
540-B	8	2	0	0	0	1.2	1	6	2	0	1	0	1.6	1
History of Education	0	1	1	3	1	3.7	4	1	0	2	1	1	3.2	4
Philosophy of Education	0	0	1	1	5	4.6	6	0	1	1	1	2	3.8	6

Table 5 -- Continued

Course	Group I							Group II						
	Assigned Ranks					Comp	Rank	Assigned Ranks					Comp	Rank
	1	2	3	4	5			1	2	3	4	5		
Other Methods	0	0	1	3	0	3.8	5	1	1	0	3	0	3.0	3
Education Psychology	0	2	4	2	0	3.0	3	0	1	4	1	2	3.5	5
Total	10	10	10	9	9	---	-	9	9	9	9	8	---	-

The students assigned a point value of 1 to the most valuable, 2 to the second most valuable, and so forth through 5. By dividing the number of students responding to each item, an average score for each course was determined. Group I rated Education 540-B the most valuable with an average score of 1.2. Eight of the ten students ranked this number one. The Introduction to Secondary Education (Education 435) and Educational Psychology were ranked second and third. As expected Group II also rated 540-B as the most valuable. Six of the nine students responding rated it first, yielding an average score of 1.6. The Introduction to Education (Education 435) and Other methods courses (courses required for the other teaching area) were ranked second and third. Although both groups ranked Education 540-B as their first choice, the average for Group I was slightly higher (1.2 versus 1.6).

The category of "Other Methods Courses" was rated fifth by Group I and third by Group II. This is an interesting result which is difficult to interpret. It may be that these courses are not as

relevant to them as Education 540-B or The Introduction to Secondary Education (Education 435), History of Education, and Educational Psychology.

Education 540-B has as an integral part of the course a great emphasis on performance and presentation of material to peers, using theory as a basis for these presentations. Since Education 540-B closely approximates the teaching of Level I Spanish in the schools, this course may be seen as extremely valuable. One may hypothesize that "Other Methods Courses" are not as relevant or valuable because the students are seldom offered a chance to teach until student teaching. The courses may be entirely theory with no performance.

Since each student in Education 540-B taught at least five times, the peer teaching and/or direct teaching experience may be the reason for rating Education 540-B so high and "Other Methods Courses" so low. One always has to consider the possible "halo effect" in ratings of this nature, i. e., the students will rate the course higher to please the instructor. Even if this is true, it does not explain why "Other Methods Courses" ranks an average of fourth by both groups. This should be examined further.

5. How will students from Groups I and II rate the value of the topics covered in their section of Education 540-B?

In the final aspect of the questionnaire, the students were asked to rank the value of the topics covered in Education 540-B. Each student was to assign a value of 1 to the topic most important to him, 2 to the second, etc. to 5.

Due to the different emphasis of each course, Groups I and II covered only five topics in common. Both covered the following teaching activities: dialog, structure, and vocabulary; and these techniques: grammar generalizations and pattern practice. Group I also covered lesson planning, microteaching, and team teaching, while Group II covered lesson planning, reading, writing, and testing and evaluation. Table 6 shows the comparison.

Table 6
Ranking of Topics Covered in Education 540-B

Topic	Group I		Group II	
	Mean	Rank	Mean	Rank
Dialog	2.9	4	2.3	1.5
Structure	4.0	6	3.0	4
Vocabulary	2.8	3	4.0	8.5
Generalization	4.3	7	3.5	5
Pattern Practice	3.8	5	2.3	1.5
Lesson Planning	2.1	2	2.9	3
Microteaching	1.4	1	---	-
Team Teaching	4.5	.8	---	-
Reading	---	-	3.0	7
Writing	---	-	4.0	8.5

Group I ranked microteaching as most beneficial. This had been expected because of its value as direct experience and because of the close observation and immediate feedback from the pupils, peers, and instructor.

This writer expected team teaching to be ranked second, since it approximates real teaching, occurring in a regular classroom. However, lesson planning was ranked second. It seems that this topic may have been perceived as so essential to both microteaching and team teaching that it was rated very high. Perhaps, too, this topic gives the students security, since they do not know what to expect from student teaching.

Group I rated team teaching as eight, the lowest rank. This ranking suggests that the successful microteaching experience was superior to the actual classroom experience. The latter lacked the immediate feedback component from the pupils, peers, and instructor. Also, some of the students were displeased when they had to be interrupted during their teaching. (This was necessary so that all would be permitted to teach.) Some of the students were unable to judge when their time had elapsed. Thus, they expressed frustration at having prepared and practiced their presentation without having a chance to complete it. This interruption never occurred during microteaching.

The teaching of dialog and pattern practice received the same average score from Group II and, thus, ranked highest. Lesson planning ranked third. Once again, lesson planning appears as beneficial to a pre-service teacher. Teaching of dialog also appears to be important to both groups -- ranks of 1 and 3 are shown for Group II and I respectively.

6. Do pre-service teachers, who have received early direct experience, have a better understanding, as measured by an Attitude Survey, of the purposes of

the dialog, of pattern drills, of abstract words, or grammar generalizations, and lesson plans than those who have not received such training?

An Attitude Survey was prepared by this writer in an attempt to measure the effect of the methods courses. The specific observation is the effect of the direct experiences -- microteaching and team teaching -- as compared to non-direct experiences.

Students indicated their feelings about each item by making a check-mark on a fifty point scale from High to Low (See Appendix A for a copy of the Attitude Survey). It was felt that the fifty point scale would yield more exact data and would exemplify the continuum aspect of feelings. Each instructor told his class to place a check-mark along the continuum. The students were unaware that there were fifty points on the scale.

The following tables will present the information according to item similarity rather than by topic. Table 7A presents the pre-test and post-test means, and the probability score from Groups I and II on the items which read: 'My understanding of the purpose of a . . . is'. Table 7B presents the same information for items which read: 'My understanding of how to teach a . . . is', and Table 7C presents this information for items which read: 'My understanding of how . . . fits into an audio-lingual program is'. These three tables combine those items dealing with 'understanding' into a comprehensible grouping. As with the remainder of this study, the level of significance was $p < .10$.

Table 7A shows that none of the items attained a p value of $< .10$; nor was there a trend that could be described. From this data, it

seems apparent that the close co-ordination between the instructors of the groups results, then, support the comparability of the two courses.

Table 7A

Mean Scores and p Values for Groups I and II
Questions reading "My understanding of the
purpose of . . . is"

Items	Means-Group I		Means-Group II		p
	Pre	Post	Pre	Post	
1.Dialog	38.11	47.22	44.77	45.33	.132
7.Pattern Drills	36.22	45.55	45.11	45.66	.152
13.Abstract Word	36.22	44.77	45.55	43.33	.195
19.Generalization	32.44	37.88	45.22	44.55	.762
25.Lesson Plans	40.77	42.66	43.88	43.11	.742

Table 7B

Mean Scores and p Values for Groups I and II
Questions reading "My understanding of how
to teach a . . . is"

Items	Means-Group I		Means-Group II		p
	Pre	Post	Pre	Post	
2.Dialog	27.88	46.22	40.66	41.44	.007
8.Pattern Drill	30.66	44.66	43.55	38.88	.149
14.Abstract Word	28.33	43.66	41.11	41.55	.181
20.Generalization	20.33	39.33	42.11	34.33	.138

From Table 7B, only item 2 was significant, "My understanding of how to teach a dialog is". The students in Group I, then, attained a

significantly higher score on this item than those from Group II. Since this is the only item which was significant, it appears that the direct experience, micro- and team teaching, is responsible for the difference. This aspect of the course, direct experience, given only to Group I, was centered around the teaching of a dialog and the use of the dialog as a catalyst for other activities.

Table 7C

Mean Scores and p Values for Groups I and II
Questions reading "My understanding of how
. . . fits into an audio-lingual program is"

	Means-Group I		Means-Group II		p
	Pre	Post	Pre	Post	
3.Dialog	39.11	47.66	43.55	42.33	.020
9.Pattern Drill	40.88	46.44	43.77	42.66	.014
15.Abstract Word	37.22	45.55	41.66	40.55	.004
21.Generalization	35.22	46.44	44.11	42.88	.036

The results reported in Table 7C are from responses reading: "My understanding of how . . . fits into an audio-lingual program is". For each item, the significant result ($p < .10$) shows the post-test mean of Group I to be higher than that of Group II. Although each of the topics was discussed in both methods courses, the understanding of how these topics fit into an audio-lingual program is significantly better for students who also had direct experience through micro- and team teaching.

Often, students fail to understand how the topics of dialog, pattern drill, abstract words, and grammar generalizations relate to

the teaching of a foreign language. The classroom lecture method and peer teaching are necessary to communicate the basic information, but seem to present the material in a fragmented, unrelated manner, and do not allow for the continuity one would find in a language classroom. There often appears to be a schism in the part-whole relationship, i. e., the students understand what a dialog is, and how to teach it, but cannot conceptualize how the "part" fits into the "whole" language classroom.

These highly significant results indicate that the direct experience permits the students to unify and integrate the various elements of the methods course into a meaningful Gestalt. This type of experience is worthwhile, if the student can see the rationale for including such activities as dialog teaching into their language course, especially since many of these students were taught a language by "traditional" methods. Thus, coupled with inexperience and lack of familiarity with the teaching method, there is frequently low credence and high scepticism to be overcome. Direct experience immediately following training in the teaching of these activities seems an excellent training technique to help students learn how these activities fit into an audio-lingual program.

The reader should be aware of the unusual gains made by Group I from the pre- to the post-test on some of the items presented in Tables 7A, 7B, 7C, and other tables that follow, which relate to the Attitude Survey. On many of these items, significance was not reached in spite of rather large gains. The ANCOV may not be a fair indicator

of significance of the pre-post-test results. This is especially true for items eight, fourteen, and twenty of Table 7C.

A visual check of the mean gains seems to indicate that the direct experiences did cause the gain, since there is no indication, based on other instruments used and due to the randomization of students to groups, that the two groups were different.

Also, the students in Group I, who were about to enter micro-teaching, may have rated themselves lower thinking that the instructor was interested in ascertaining how much they would improve as a result of the training. This would help to explain the large discrepancy of the pre-test means.

To summarize the results of these three tables, it appears that either the standard methods course or the methods course with direct experience can offer students some understanding of the purpose of dialog, pattern drill, abstract word teaching, grammar generalization, and lesson planning. These same lecture techniques can give students some understanding of how to teach a pattern drill, abstract words, and grammar generalizations; however, students given direct experience, micro- and team teaching per this study, understand how to teach a dialog significantly better than students who have not had direct experience. This study goes on to affirm that those students with direct experience felt significantly better at integrating material from the methods course than those without direct experience. Students from Group I indicated a significantly higher mean value for the items, 'My understanding of how . . . fits into an audio-lingual program is . . . ' than did students from Group II.

7. Are pre-service teachers, who have received early direct experiences, better able, as measured by an Attitude Survey, to adapt or supplement materials for the teaching of the dialog, pattern drills, abstract words, grammar generalizations, and writing lesson plans than those who have not received such training?

The Attitude Survey described in section six also presented items designed to ascertain whether the mean scores for Groups I and II would differ relative to adapting and supplementing materials for teaching various skills. Often, students fail to prepare enough materials for a class, and especially in those cases when the examples chosen are too obscure or do not convey the appropriate information to the pupils. If this should happen, the teacher must be prepared with additional material already prepared or he must conjure up more examples immediately or re-teach the same topic at some future time. Table 8 presents these results.

Table 8

Mean Scores and p Values for Groups I and II
Questions reading "My ability to adapt or
supplement . . . is"

Items	Means-Group I		Means-Group II		p
	Pre	Post	Pre	Post	
4.Dialog	24.44	40.66	36.00	35.77	.217
10.Pattern Drills	24.78	42.55	41.22	38.22	.187
16.Abstract Words	28.11	37.00	38.77	37.11	.410
22.Generalization	19.55	30.88	37.55	35.88	.974
26.Lesson Plans	25.66	35.11	33.88	37.11	.997

As in Table 7A, none of these items was significant. These are items which were part of the lectures for both groups. It was thought that direct experience might point out the need for teachers to prepare a greater volume of material. Evidently, the students had prepared sufficient material to adequately teach their micro-lessons. Preparing for the re-teach cycle of the microteaching did not seem to present a problem.

From these results, it appears that the ability of students to adapt or supplement materials is unaffected by pre-service training involving direct experience, specifically microteaching and team teaching.

8. Are pre-service teachers, who have received early direct experiences, better able, as measured by an Attitude Survey, to determine when the dialog, pattern drill, abstract words, or grammar generalization have been learned than those who have not received such training?

Continuing to use data from the Attitude Survey described in section six, it seems appropriate to consider the mastery of material. Since one important aspect of the teaching of a foreign language is knowing when pupils have learned material in order to avoid monotonous repetition, a teacher must be sensitive to this and develop the intuition of knowing when sufficient learning has taken place. Table 9 presents the results of the ANCOV statistics for items reading "I am able to determine when my pupils have learned . . ."

Table 9

Mean Scores and p Values for Groups I and II
Questions reading "I am able to determine
when my pupils have learned . . ."

Items	Means-Group I		Means-Group II		p
	Pre	Post	Pre	Post	
5.Dialog	31.44	45.88	36.22	38.88	.035
11.Pattern Drills	30.22	45.88	39.88	39.11	.009
17.Abstract Words	33.22	44.11	40.44	37.33	.042
23.Generalization	32.11	38.22	37.55	37.77	.659

The writer expected that direct experience would have a significant effect on these items. The results show that students from Group I responded to three of these four items with a mean score significantly higher than students from Group II. These significant scores indicate that the direct experiences of micro- and team teaching present the students with an opportunity to be able to ascertain when learning has occurred. The one item which did not attain significance, 23. Generalization, was the one activity that these students practiced least. The non-significant result is probably due to this lack of exposure and experience. In addition, it should be recalled from Chapter III that Group I received "broken training" in this technique, i. e., some training took place during the microteaching experience and during one classroom period when the co-operating school was closed for the afternoon. The "broken training" coupled with less teaching of generalization when compared to the other activities probably have some bearing on the non-

significant results.

9. Do pre-service teachers, who have received early direct experiences have different expectations of pupil ability, as measured by an Attitude Survey, than teachers who have not received such training?

The final aspect of the Attitude Survey described in section six was concerned with teacher expectations. Methods students often view teaching as easy when they teach their peers. Lacking experience with actual pupils, students fail to realize that their pupils know very little when compared to the knowledge possessed by methods course colleagues. Prior to student teaching, the students' pre-conceived expectations of pupil ability tend to be inflated, frequently leading to disappointment with pupil performance. It is believed that direct experience prior to student teaching would indicate to students the different levels of ability among pupils and would prepare the pre-service teacher for the shock of the disparity between his expectations based on college class colleagues and real performance of pupils. Table 10 presents the results of student responses to those survey items reading "My pre-conceived expectations of pupil achievement versus pupil real achievement in ability to learn . . . is".

The results show that students from Group I scored significantly higher averages for items six and twelve. The intent of these four items was to see if direct experience would lower the students' expectations of their pupils to a more realistic level in order to decrease their disappointment with the performance of their pupils. Therefore, the expected results were that Group I would score lower than Group II, because their pre-conceived expectations would be lower.

Table 10

Mean Scores and p Values for Groups I and II
Questions reading "My pre-conceived expectations of pupil achievement versus pupil real achievement to learn . . . is"

Items	Means-Group I		Means-Group II		p
	Pre	Post	Pre	Post	
6.Dialog	23.77	40.00	31.33	30.66	.009
12.Pattern Drills	23.44	40.44	33.77	33.22	.016
18.Abstract Words	25.55	36.33	31.11	31.77	.261
24.Generalization	25.11	33.66	36.55	34.44	.673

In reviewing these results, it is highly likely that the wording of these articles was very confusing. During the administration of the survey, some students asked for clarification of these items, but by pre-arranged agreement to standardize the administration, neither instructor offered help.

Because of the possible confusion of the wording of these items and the marked variance from the writer's intent, it seems futile to place too much emphasis on these results. Additional use of the instrument and rewriting of these items are needed to see if this finding is replicated.

Data from Student Teaching

10. Do pre-service teachers, who have received early direct experiences, perform better during student teaching, as measured by the Performance Centered Criteria (PCC), than those who have not received such training?

During the Winter and Spring Quarters, the eleven student teachers from Groups I and II, who were available for continuation of the teaching performance variable, were videotape recorded during the third week of full-time teaching. These videotapes were then evaluated by two unbiased raters, who were experienced teachers, and who were given training by the investigator. Inter-judge reliability was .73. Reliability was established using a Pearson Product Moment Correlation. Ratings of 0 - 10 were assigned after viewing each student teacher for thirty minutes. (0 is a poor teacher, 5 average, and 10 superior.) Table 11 presents the scores assigned by each rater, and the mean score for each group.

Table 11

Scores of two raters on teaching performance of student teachers of Groups I and II, and mean score for each group.

Teacher	Group I			Group II		
	Rater A	Rater B	Mean	Rater A	Rater B	Mean
1	2	3	2.5	4	4	4.0
2	5	4	4.5	2	0	1.0
3	6	4	5.0	7	9	8.0
4	6	6	6.0	6	6	6.0
5	7	7	7.0	6	7	6.5
6	7	5	6.0	-	-	---
Group	-	-	5.16	-	-	5.1

Although the average score for Group I was slightly higher (.06)

than Group II, the difference is not significant. These results would therefore suggest that direct experience has no effect upon the score given student teachers by experienced teachers. However, the writer feels that there are several factors which might have influenced these results.

Traditionally, student teaching occurs during the final quarter of a student's senior year, most often, the Spring Quarter. Of the eleven students in this study, eight followed this tradition, meaning that twelve weeks elapsed between the direct experiences (micro- and team teaching) during the Fall Quarter methods course and student teaching. A comparison was made between two of the three students who taught Winter Quarter and the remaining four from Group I who student taught twelve weeks later during Spring Quarter. From Table 10, they are students five and six from Group I and student three from Group II. The average score for students five and six was two points higher than the average score for the remainder of Group I. When subjected to a t test, this difference falls short of $p < .10$ by .03, i.e., $t_{\text{observed}} = 2.10$; $p = .10$ table value = 2.13. It seems appropriate to say that given more than four degrees of freedom, significance would have been attained. The trend indicated here suggests that the student teaching experience which follows immediately after the direct experiences of microteaching and team teaching is superior as rated by experienced teachers to that teaching which occurs at a later time.

An additional factor which should be mentioned occurred during the Winter Quarter, when seven of the eight students not involved in

student teaching, enrolled in Education 616, a second foreign language methods course. There were four students from Group I and three from Group II. During this methods course, some team teaching took place. This may have equalized the experience of the seven people, especially in light of the propinquity of the second methods course with student teaching.

11. Do student teachers, who have been trained in interaction analysis have higher indirect verbal patterns than those student teachers, who have not received such training?

In an attempt to determine whether there was any difference in the indirect/direct (i/d) verbal behavior of the student teachers involved in this study, two separate codings of four hundred interactions were tallied for each teacher -- the first taken during the second week of full-time student teaching, and the second during the seventh week of full-time student teaching. The i/d ratio is tabulated by taking the sum of categories one, two, and three and dividing them by the sum of categories six and seven. If a teacher's i/d score is 1.0 or higher, this indicates that he tries to motivate pupil learning by means of praise, empathy, or accepting pupil ideas. If he has a score of .9 or lower, then the teacher tries to control the pupils by means of commands, directions, or justification of authority.

A modified Flanders System was used. In this case, Category 10 indicates interaction between pupils, while 10' indicates silence or confusion.

Table 12 shows the average scores and differences for the first coding, and Table 13 shows the same for the second coding.

Table 12

Average Scores of Groups I and II on First
Interaction Analysis Coding

Categories	n = 3 Group I	n = 4 Group II	Difference
1	.25	.00	.25
2	4.83	4.37	.46
3	.08	.18	.10
4	6.83	9.68	2.85
5	21.41	17.33	4.08
6	25.25	25.68	.43
7	.42	1.50	1.08
8	34.50	31.31	3.19
9	.17	.56	.39
10	1.00	.37	.63
10'	5.25	9.00	3.75

A t test was run on the means of the two groups; there was no significant difference on the first coding, even though Group I had a slightly higher indirect average (the sum of categories one, two, and three) 5.16 to 4.55 for Group II, and had a lower direct average (the sum of categories six and seven) 25.67 to 27.18.

Another t test was run on the mean scores of the second coding. Again, there was no significant difference between the two groups. However, Group I dropped from an average of 5.61 on the first coding to 3.41, even with IA training! But, their direct scores also dropped -- 25.67 to 23.49. In the meantime, Group II also dropped on the indirect level -- 4.51 to 2.45, while their direct scores rose from

23.49 to 33.52. It appears that the IA training had no effect on the categories one, two, or three for Group I, but this group decreased its direct average while Group II's average rose ten percentage points.

Table 13

Average Scores of Groups I and II on the Second Interaction Analysis Coding

Categories	n = 3 Group I	n = 4 Group II	Difference
1	0.0	0.0	0.0
2	3.16	2.33	.83
3	.25	.12	.13
4	6.83	7.12	.79
5	15.25	15.60	.35
6	23.08	33.00	9.92
7	.41	.52	.11
8	36.75	34.43	2.32
9	0.0	.70	.70
10	5.83	.06	5.76
10'	8.0	6.0	2.0

One other distinct advantage appears to go to the pupils of Group I. In both codings, there was more pupil talk (Category eight), and more pupil-to-pupil talk (Category ten). This is one topic which was discussed during the IA training sessions -- ways to incorporate more pupil talk into the lesson. The topic of how to praise and encourage pupils, and to accept their ideas does not appear to have been successful. It would seem that ten hours of IA training is

insufficient to bring about significant change on this variable. The students of Group I expressed to the writer that it was difficult for them to praise pupils or to be empathic of the difficulties of language learning, since none of their teachers had ever been that way to them. It was also indicated that to be empathic or to praise was, somehow, a sign of weakness on the teacher's part. This attitude, too, was probably learned from past educational experiences.

One other important explanation for the lack of any significance may be due to the language ability of the student, and his competence as a teacher. During the teaching act, he has to be conscious of what he is teaching, what the next activity is, and how he is going to say it in the foreign language. Coupled with some nervousness, thinking about rewarding a pupil response or accepting what he has said, and then converting this into the foreign language may be too much at one time for the student teacher. Thus, it is easier not to reward, praise, or accept, than to waste time getting into a linguistic jam.

12. Do the pupils of teachers who have been trained in the use of interaction analysis have a more positive attitude toward foreign languages, as measured by the Foreign Language Attitude Questionnaire (FLAQ) than the pupils of those teachers who have not received such training?

The FLAQ was administered twice to the four classes of the students who received IA training and to four classes of student teachers in Group II. There were eighty-three pupils in Group I and seventy-nine in Group II.

A total attitude toward foreign languages, which encompasses the three dimensions of 1) "How the pupil feels about the foreign language

he is studying", 2) "How the pupil feels while he is in the foreign language class", and 3) "How the pupil feels about the foreign language teacher", is used for the discussion of question twelve.

The results of the FLAQ, surprisingly, showed that the pupils of Group I student teachers had a less favorable attitude toward foreign languages, $p .01$. This finding is not consistent with Moskowitz' (36) that no statistically significant changes took place. There are several explanations that can be offered.

First, the students in the Moskowitz study received more than twenty-five hours of IA training, while the students of Group I averaged ten hours of training. Thus, if no significant difference could be registered after twenty-five hours of training, then one could not expect it to in this study.

Second, five of the eight classes were administered the FLAQ during the Spring Quarter (the last eight to nine weeks of school for the pupils). Of the eight classes involved, two were Level I, second year. Thus, it is very possible that the pupils' attitudes toward foreign language learning were already conditioned by the regular classroom teachers and not necessarily as a result of the student teachers.

Finally, there were insufficient subjects involved in this dimension (four in each group). Private conversations with Dr. Moskowitz revealed that at least ten student teachers are needed for each group. Therefore, if there is one very "bad" student teacher in a group, pupil attitude can be severely affected giving an impression

that may not be indicative if there were a larger N. Such a case happened (see question thirteen) when one student teacher of Group I scored thirty-two points lower than any other on the Student Teacher Attitude Questionnaire. Thus, if there were two hundred pupils in each group, instead of eighty-three and seventy-nine respectively, such bizarre results probably would not have occurred.

13. Do student teachers, who have been trained in interaction analysis have less positive attitudes toward their co-operating teachers, as measured by the Student Teacher Attitude Questionnaire (STAQ) than those student teachers who have not received such training?

During the Winter and Spring Quarters, the STAQ was administered to all students from Group II who student taught ($N = 4$) and to the students from Group I who participated in the IA training ($N = 4$). One student was unable to take the pre-test form, due to the closing of the University, and was eliminated from any analysis based on this measure. The final N for the STAQ was seven.

This form, the STAQ, attempts to measure student teacher attitude toward the co-operating teacher. The lower the score, the less positive the attitude toward the co-operating teacher. Table 14 will present the significance levels and means for Groups I and II on the pre- and post-tests on the STAQ.

From a first glance, it would appear that Group I held less positive attitudes toward the co-operating teacher (difference equals 10.50). However, this was not the case. One student in Group I scored 50 on the pre-test, but 76 on the post-test. The rather low score, plus an N of three made the mean score much lower. This student's

score was thirty-two points lower than any other student on the pre-test. As a result, the standard deviation for Group I was almost double that of Group II. A t test yielded a value of 1.04 (non-significant), and a probability of $>.20$.

Table 14

Pre- and Post-test Means and Significance Levels
on the STAQ for Groups I and II

Treatment	n = 3 Group I	n = 4 Group II	Difference	p
Pre-test	74.00	85.50	10.50	$>.20$
Post-test	82.67	83.13	.46	$>.50$

This writer recalls the above student was very upset with the co-operating teacher and college supervisor. The difficulty seemed to be that the co-operating teacher would not leave the classroom of the student teacher (interpreted by the student teacher as a lack of faith in her ability) and this writer believes that this resulted in the low attitude. The writer suggested a three way conference to clear up certain misunderstandings, which may have caused the more moderate attitude on the post-test. The writer does not believe that the IA training was responsible for the low attitude, since the other two students scored eighty-two and ninety respectively.

At the time of administration of the pre-test, the students of Group I had completed about eight hours of IA training. This small amount of training was probably not enough to effect any change in attitude, especially since the students had been student teaching for

a short time (two and one-half to three weeks) and still had cordial relationships with the co-operating teacher. Any significant difference in attitude was expected on the post-test.

The scores on the post-test, however, were more comparable, with only .46 points difference. This yielded a t value of .06 with a probability of $>.50$. Thus, it seems that even with the additional two hours of IA training, it was not enough to effect less positive attitudes toward the co-operating teacher.

Another variable, which may be germane to the discussion, is the attitude of the co-operating teacher. The writer noted that the teachers were either empathic and very helpful in their critique of the student teacher, or they were neutral, i. e., they offered little help and left the student teacher "on his own". The student teacher in the latter case would not encounter any negative feedback, which would make him have a less positive attitude toward the co-operating teacher.

CHAPTER V

SUMMARY AND IMPLICATIONS

The purpose of this chapter is to present a summary of the results obtained during this study and to discuss some of the implications arising from them that involve the inclusion of direct experiences (microteaching and team teaching), and interaction analysis (IA) in the pre-service training of foreign language teachers.

A description of the microteaching model developed by the Foreign Language Education Department of the Ohio State University will be included.

This study was undertaken in the normal setting of a Spanish methods course during the Fall Quarter, and the student teaching experience during Winter and Spring Quarters at the Ohio State University. Originally the study consisted of twenty pre-service teachers of Spanish who were randomly assigned to two methods courses: Group I which received the direct experiences of micro- and team teaching, and interaction analysis training, and Group II which received the standard methods course. Of the original twenty, only eleven were available for the latter part of the study, i. e., the evaluation of classroom performance. Some of the students chose not to student teach during the above period; others were eliminated from the latter phase of the study due to the nature of their student teaching assignment, i. e., one student was assigned to teach a third year Spanish

class which was primarily literature oriented, and another was assigned to a class that knew no Spanish and lacked discipline. Finally, one student was lost from the study when the University was officially closed for a two week period during the Spring Quarter. This student was dependent on the University for room and board.

For analysis of classroom teaching performance, there were eleven students. Four students from Group I received the IA training. The Foreign Language Attitude Questionnaire was administered twice to eight classes. The Student Teacher Attitude Questionnaire was taken by seven student teachers on the pre- and post-tests.

The purpose of the study was to determine the feasibility of including microteaching, team teaching, and interaction analysis in the training of pre-service foreign language teachers.

Several instruments were used to collect data on the students and pupils involved.

The "Teaching Situation Reaction Test" was used to gather data on teacher attitudes toward teaching.

The "Attitude Survey", designed by the author, attempted to collect information on the effect of direct experience, micro- and team teaching, on several aspects of language teaching, i. e., dialog teaching, pattern practice, and grammar generalizations.

An "Ability Scale" was designed by the author to measure how students perceive their ability to teach Level I Spanish at the end of Education 540-B.

An "Anxiety Scale", designed by the author, was used to measure the expressed level of anxiety the students had prior to student teaching.

The "Performance Centered Criteria", a form developed at Stanford University by Robert Politzer, was used (in a modified form) to evaluate teaching performance of students from Groups I and II during student teaching.

A rating scale, designed by the author, was given to both groups, to rate the value of Education 540-B in comparison to other education courses, and to rate the value of topics covered in Education 540-B.

The "Student Teacher Attitude Questionnaire" was administered to ascertain whether student teachers who have received IA training have different attitudes toward their co-operating teacher.

The "Foreign Language Attitude Questionnaire" was administered to the pupils of the student teachers of Groups I and II to measure the attitudes of the pupils toward foreign languages.

Summary of Results

As a feasibility study, answers were sought to the following areas of concern:

1. Will pre-service teachers, who have received training in microteaching, have a more positive attitude toward teaching, as measured by a higher score on the Teaching Situation Reaction Test (TSRT) than those who have not received such training?

As measured by the TSRT, there was no significant difference on the pre- or post-test scores between the two groups.

2. Do pre-service teachers, who have received early direct experiences report less anxiety prior to student teaching than those who have not received such training?

On the average, students who have received direct experiences report lower anxiety scores prior to student teaching, although the difference between the two groups was not significant.

By eliminating one student from Group II, (he reported a score of "very low", which was greater than three standard deviations from the mean for either group) and by combining the results from a French methods course, which was comparable in content to Group II, a second

t test yielded a t value of 2.4, which was significant beyond the .05 level. Using this result, it is apparent that the direct experience did decrease the anxiety expressed by students prior to student teaching.

3. Do pre-service teachers, who have received early direct experiences, report higher confidence in their ability to teach Spanish than those who have not received such training?

Students in Group I reported a higher confidence in their ability to teach Spanish at the conclusion of the methods course. However, this difference was not significant due to the small degrees of freedom -- eight.

By including the results from the French methods course mentioned above, the difference of Group I compared to the scores of Group II plus the French group yielded a t value of 3.33, which was significant beyond the .01 level. The larger degrees of freedom, thirty-five, was responsible for the highly significant result. Thus, one is led to the conclusion that successful direct experience produces students who express greater confidence in their ability to teach Spanish.

4. How will students from Group I, that group receiving direct experiences, and Group II, that group receiving the standard methods course, rate the value of their methods course, Education 540-B, compared to other education courses?

The investigator wanted to ascertain whether Education 540-B would be perceived as more valuable when direct experiences were included than when the course was taught in the standard manner, and how the students would rank other education courses with Education 540-B.

Students from Group I rated Education 540-B with an average score of 1.2, while students from Group II rated it 1.6 (the lower the score, the more valuable). Education 435, an Introduction to Secondary Education, and Educational Psychology were rated second and third by Group I, while Education 435 and Other Methods Courses were ranked second and third by Group II.

Surprisingly, "Other Methods Courses" (courses required for the other teaching area) was rated an average of fourth by the two groups.

5. How will students from Groups I and II rate the value of the topics covered in their section of Education 540-B?

Group I, as expected, rated microteaching as the most valuable topic; lesson planning was rated second. Surprisingly, this group rated the team teaching as eighth.

Group II rated teaching of dialog and pattern practice as having equal value to them as future teachers. Lesson planning was their third choice. Teaching the dialog was rated third by Group I. Teaching the dialog and lesson planning are seen as very valuable for both groups as these two topics were rated in the top three by each group.

6. Do pre-service teachers, who have received early direct experience, have a better understanding, as measured by an Attitude Survey, of the purposes of the dialog, of pattern drills, of abstract words, of grammar generalizations, and lesson plans than those who have not received such training?

There appears to be no difference between the two groups on items reading, "My understanding of the purpose of the . . . is". This

indicates that there was apparently close co-ordination between the instructors of the two groups which resulted in lectures and demonstrations that were comparable.

On the items "My understanding of how to teach a . . . is" only the item of dialog teaching was significant in the direction of Group I. Much of the micro- and team teaching was centered on the teaching of the dialog and its use as a catalyst for other activities. It appears, then, that the direct experience was responsible for this difference.

On the items "My understanding of how . . . fits into an audio-lingual program is" the post-test scores for Group I are significantly higher, $p < .10$, than those of Group II. The direct experience apparently permits the student to unify and integrate the various elements of the methods course into a meaningful Gestalt.

7. Are pre-service teachers, who have received early direct experiences, better able, as measured by an Attitude Survey, to adapt or supplement materials for the teaching of the dialog, pattern-drills, abstract words, grammar generalizations, and writing lesson plans than those who have not received such training?

Ability to adapt or supplement materials for foreign language teaching apparently is unaffected by the direct experiences as presented in this study, for none of the items were significant, nor was there any trend developing.

8. Are pre-service teachers, who have received early direct experiences, better able, as measured by an Attitude Survey, to determine when the dialog, pattern drill, abstract words, or grammar generalization

have been learned than those who have not received such training?

The students from Group I responded to three of the four items with a mean score significantly higher than students from Group II. It seems that even limited direct experience can help students develop the ability to determine when learning has taken place. Significance was not reached on grammar generalization. This topic was given the least exposure in the methods course and the students did little grammar generalization during the direct experience, probably accounting for the non-significant result.

9. Do pre-service teachers, who have received early direct experiences have different expectations of pupil ability, as measured by an Attitude Survey, than teachers who have not received such training?

It was expected that the direct experience would help students lower their expectations of pupils' ability to learn foreign languages, which is usually inflated prior to student teaching. Students from Group I scored higher on two of the four items; there was no significant difference on the other two. It is highly likely that the wording of the item was confusing, since several students asked for clarification of it during the administration of the survey.

10. Do pre-service teachers, who have received early direct experiences, perform better during student teaching, as measured by the Performance Centered Criteria (PCC), than those who have not received such training?

Videotapings of the eleven teachers who were available for inclusion in this phase of the study were evaluated by two unbiased raters

who were experienced language teachers. Inter-judge reliability was .73 using a Pearson Product Moment Correlation. Scores of zero through ten were assigned to each teaching performance. The mean for Group I was 5.16, while Group II's mean score was 5.10. The difference was not significant suggesting that the direct experience has no measurable effect on teaching performance. However, the writer believes that there are several factors that mitigate such a statement: 1) Several students from both groups were enrolled in another methods course the following quarter in which some team teaching took place. This direct experience gained by Group II students may have been enough to equalize any difference; 2) Eight of the eleven students in this study student taught in the Spring Quarter, some twelve weeks after the conclusion of the direct experiences as described in this study. Any superiority in teaching skills may have been lost due to the long period of time. To support this, an analysis was made between two students from Group I who did student teaching during the Winter Quarter versus the four who taught in the Spring. The mean score for the former was two points higher than for the other four, suggesting that student teaching immediately after the direct experiences of microteaching and team teaching is superior, as rated by experienced teachers, to student teaching which occurs at a later time.

11. Do student teachers, who have been trained in interaction analysis have higher indirect verbal patterns than those student teachers, who have not received such training?

There was no significant difference in the verbal patterns of

those student teachers who were given training in IA and those who did not receive such training.

This non-significance may be attributed to 1) insufficient training time (ten hours), and 2) student teacher inability to incorporate appropriate indirect verbal behavior into the target language due to linguistic competence, or 3) concentration on other aspects of the teaching act such as the next activity, the materials to be used, and how to make the transition in the foreign language.

12. Do the pupils of teachers who have been trained in the use of interaction analysis have a more positive attitude toward foreign languages, as measured by the Foreign Language Attitude Questionnaire (FLAQ) than the pupils of those teachers who have not received such training?

As measured by the Foreign Language Attitude Questionnaire (FLAQ) the pupils of Group I student teachers had significantly lower ($p .01$) attitudes toward foreign languages. However, there are three reasons which minimize these results: 1) the student teachers received only ten hours of training; 2) the pupils' attitudes may have been low as a result of the regular classroom teacher, and 3) the total N of seven is too small, thus permitting great chance for error.

13. Do student teachers, who have been trained in interaction analysis have less positive attitudes toward their co-operating teachers, as measured by the Student Teacher Attitude Questionnaire (STAQ) than those student teachers who have not received such training?

As measured by the Student Teacher Attitude Questionnaire, there was no significant difference between Group I and Group II student teachers and their attitudes toward their co-operating teachers.

Microteaching in the Pre-Service Component of Foreign Language Teaching

One of the most important factors for the inclusion of microteaching in the pre-service component of foreign language teachers rests on the students' command of the foreign language. At the present level of language training, most candidates do not develop language proficiency (Speaking) until the junior year. Therefore, it would be foolish to attempt microteaching in the schools, with trainees of this background, until the junior year. Foreign language teaching is not intellectually based, as the teaching of English or Social Studies. (Basic concepts and learning patterns cannot be intellectualized in the basic skills -- Speaking, Understanding -- but they certainly can and must be in literature, linguistics, phonetics, and culture and civilization.) Pre-service teachers of English or Social Studies could begin direct experiences as early as the first year. On the other hand, foreign language teaching is skill-based and one has to wait for that skill to develop. (Lack of this skill would be detrimental to the establishment of a microteaching program in the schools, since the language teacher expects competent teacher trainees who speak and pronounce the language well.)

In order to identify and correct teaching weaknesses long before student teaching, the foreign language methods course should be required during the junior year. If teaching performance is weak, the student should be required to repeat the methods course as soon as possible, preferably the following term. Special attention should be given to any individual, especially during microteaching, who has to repeat the methods course.

Sophomores, who have demonstrated adequate language proficiency, should be permitted to take the methods course. (Language proficiency is a screening device to keep linguistically incompetent students from the methods course. The purpose of the methods course is to improve pedagogical skills; it is not a course to improve language skills.) This affords earlier exposure to teaching and allows more time for improvement of teaching skills, especially if there are severe weaknesses. It would also help the student to decide at an earlier point in his training whether he wishes to become a teacher.

Establishing a Microteaching Program in the Schools

For teacher training institutions that wish to incorporate microteaching and/or team teaching in a school setting, as an integral part of the foreign language methods course, the writer offers the following suggestions:

1. Locate a school (junior or senior high) which permits ease of transportation, and which can provide facilities (rooms or space) to do microteaching.
2. Find a teacher who is amenable to the methods course objectives and who is willing to provide the students with his language class objectives and lesson plans for the given period. (The lesson plans should include the kinds of activities desired to achieve the language objectives, and the material to be taught.) He will also be responsible for finding pupils who are available from study halls during the microteaching period. He should select pupils of different abilities so that the experience is more like a real class session.

If team teaching is desired, he should be willing to allow his classes to be used for this purpose. If funds are available, this teacher should be reimbursed for his time and efforts.

3. Check the school's calendar to verify any dates or portions of days that class schedules will not follow the normal pattern. The microteaching sessions may not be able to function if a class period has been reduced due to an assembly, etc. Class sessions that are fifty to fifty-five minutes in length are usually best for microteaching sessions.

4. If possible, keep a two hour time block open for the students on the days that microteaching is planned for the schools. (It would be desirable for the whole course to be scheduled as a total laboratory course.)

5. An opportunity should be given for each student to teach at least one complete class period in conjunction with the fifteen minute team teaching of three to five days.

6. Feedback during team teaching must come from the pupils, as in microteaching. The students respect the pupils' comments very much.

The Ohio State University Foreign Language Microteaching Model

For the purpose of this study, which took place in a school setting, a variation of other microteaching programs was designed to fit the needs of this program. The Ohio State University Foreign Language microteaching model, presented below, is unique in several ways:

1. Microteaching takes place in a school setting, during school

hours.

2. It is the responsibility of the classroom teacher to prepare weekly lesson plans and instructional objectives (which are made available to the micro-teachers), and to secure micro-pupils who represent various stages of language competence within the same level of instruction.

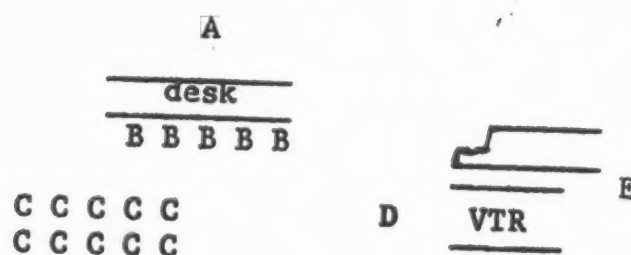
3. The micro-lessons taught to the pupils are based on the material under study in the regular classroom at that particular time and not on material too difficult for the linguistic competence of the pupils.

4. The micro-pupils are the most influential in giving feedback to the micro-teacher. Frequently, peer or instructor critiques are unnecessary. More importantly, the micro-teachers respect the critiques given by the micro-pupils more than those of any other persons.

5. Microteaching takes place within the methods course and is an integral part of it. It generally lasts from two to three weeks, (four to six teaching days).

The Ohio State University Foreign Language microteaching model uses available space in the schools, i. e., unused rooms, balcony areas of the auditorium, and sometimes the faculty lounge, when it is available.

In the typical microteaching set up which follows, these symbols are used: A = the micro-teacher, B = the micro-pupils, C = the peers, D = the methods instructor, and E = the camera operator.



The camera operator may be a student in the course, or in some cases, the camera can be operated with no one attending it, as long as it is in focus and only one angle is desired.

The camera is set at an angle that permits taping of both micro-teacher and pupils. Filming of the pupils allows a different perspective when viewing the tapes.

Microteaching can be implemented without the video-taping; however, if a critique is to be made later, there is no permanent record which could serve as a frame of reference. (Many times a micro-teacher denies having said or done something, but immediate playback supports the critique. Thus, the micro-teacher has a new perception or some added insight into his teaching behavior and consequently has an opportunity to change his behavior. Most of the verbal analysis could be completed with the use of only the audio-tape recorder.

IMPLICATIONS

As a result of this study, the writer wishes to show the implications of it for teacher training institutions, schools, and for further research.

Implications for Teacher Training Institutions

1. The model presented in this study is feasible to initiate.

Barring major administrative details, it is easy to do microteaching in a school setting.

2. Cost to the training institution is small. No additional funds are needed for staff time. Reimbursement to the co-operating teacher is nominal.

3. Arrangements to rent videotape equipment may be better than investing large sums of money in such equipment. Video-tapes would be the only recurring cost. By renting equipment, there is no need to budget money for repairs, maintenance, and insurance.

4. Institutions which have limited funds for a microteaching center and for reimbursing pupils for their time, should consider doing microteaching in the schools.

5. Schools (public, private, or parochial) are usually readily available in the near vicinity of the institution.

6. School administrators and teachers are usually willing to co-operate.

7. Adequate physical facilities are usually available in the schools. (The hallway or lobby may be an adequate facility.)

8. Microteaching in the schools can be an effective means to bridge the gap between theory and practice.

9. Direct experiences in the schools may be a means to reduce anxiety prior to student teaching, and to help students discover what their abilities are as teachers.

10. Microteaching in the schools permits the teacher training institution to develop a liaison between schools and colleges. This

liaison may be helpful in the development of new methods and curriculum development in foreign language education.

11. There should be no microteaching program in the schools unless it fits into the learning scheme of the pupils to be taught.

12. Training in Interaction Analysis, if time permits, may be given in the methods course with as little as four hours of class time. The additional time, six to eight hours, is spent by the students in reading about IA and in practice sessions coding audio- or video-tapes, which may be kept in a listening center complex. Otherwise, the training may be given during the student teaching experience in group seminar sessions.

13. In order for the IA training to be effective, all members of the foreign language education department who supervise student teachers should be very familiar with the categories and the use of IA as a supervisory tool. Knowledge of an IA system by both supervisor and student teacher would, according to the model proposed by Amidon, improve communication by providing a common language for both, when discussing teaching. Sometimes it becomes necessary to change supervisors during student teaching. If the new supervisor knows IA, there should be little adjustment between supervisor and supervisee. However, if the new supervisor is not familiar with an IA system, communication can break down and improvement of teaching may suffer as a result. Thus, training in IA is not limited to the pre-service teacher. It must be given to all involved. This includes the supervisor and the co-operating teacher.

Implications for the Schools

1. Microteaching involving school facilities allow; the schools to play an important role in teacher training in addition to student teaching.
2. Teachers, who participate in such experiences, can be kept abreast of recent developments in teacher training, thus increasing their own professional competence.
3. School administrators may wish to include microteaching as a part of in-service education for all teachers as a means to improve teaching skills, or to try out new teaching materials prior to adopting them.
4. Pupils involved in microteaching enjoy the sessions for it gives them extra practice.
5. Experienced teachers are involved in the preparation of prospective teachers. They become familiar with the objectives of the methods course. The teachers are an important adjunct to the methods courses by providing language course objectives and lesson plans, by obtaining pupils for the microteaching sessions, and by permitting methods students to teach in their classrooms.

Implications for Further Research

During the progress of this study, and due to the review of the literature, several implications for further research were indicated. The model proposed by this study should prove useful in seeking answers to the following questions:

1. Would it be better to use college student peer groups than school pupils as the microteaching class?
2. Would it be better to do microteaching with a larger class group, for foreign language prospective teachers, than with a small group of four to five pupils?
3. Is microteaching superior to student teaching in a summer program if enough pupils of the same language background could be found for participation?
4. Is it better to do microteaching in the schools, or is the campus a better location if one considers financial, logistical, psychological, and student variables?
5. Is Videotape Recorder feedback as good as "live" feedback?
6. Is pupil feedback more valuable than peer or instructor feedback?
7. Of what importance is the choice of school, i. e., inner city, outer city, or suburban, on microteaching outcomes?
8. Of what importance is pupil selection, i. e., mixed ability, under-achiever, over-achiever, on microteaching outcomes?
9. Are pupils who have been involved in microteaching more critical of the regular classroom teacher's performance?
10. Is it best to student teach immediately following training in microteaching or can one wait ten to twelve weeks with no deleterious effects?
11. What would be the effect of the Amidon model in student teaching compared to the "traditional" mode of student teacher supervision?

12. What effect would several -- six to eight -- videotape recordings have on student teacher performance?
13. What is the minimal amount of Interaction Analysis training required to alter student teacher verbal patterns from direct to indirect?
14. Do pupils involved in microteaching study languages longer than those not involved in such training?
15. How does participation in microteaching affect the grades of the pupils involved?
16. Does pupil motivation increase as a result of microteaching participation?
17. What would be the effect of a microteaching center on the campus versus doing microteaching in the schools?

In addition to the above questions, there is a need to refine and test experimentally the instruments developed for this study, e. g., the Attitude Survey, and the Anxiety and Ability Scales.

Limitations of the Study

Throughout this study, one of the greatest limitations has been the size of groups. With fewer than ten students per group, individual variations within a group can obscure the inter-group differences, thereby masking differences which might be significant with a larger number. Conversely, intra-group differences are likely to be magnified, also an interference with statistical analysis.

Another limitation was the unexpected circumstances which prevented the completion of the microteaching sessions as planned during

the Fall Quarter, and the closing of the University, which prevented the collection of data on some students during the Spring Quarter.

In addition, three instruments were designed and written expressly for this study. The "Attitude Survey" and the "Anxiety and Ability Scales" were untried and, therefore, proved to have some confusing and unsatisfactory items.

As a feasibility study, there was a need to gather data concerning: 1) student satisfaction with the direct experiences and interaction analysis training, 2) cost analysis, 3) teacher time, and 4) staff time.

Finally, the real world of educational research militates against any study whether empirical data or feasibility. This is seen as the greatest limitation of all. But despite these limitations, the study seems to suggest that direct experiences, microteaching and team teaching, and interaction analysis do have merit, at least for more study.

APPENDIX A
INSTRUMENTS

1. Attitude Survey
2. Anxiety Scale and Ability Scale
3. Student Rating Scale
4. Performance Centered Criteria (Modified)

Attitude Survey

Form	1	2
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Use a (✓) on the dotted line.

1. My understanding of the purpose of a dialog is
 High.....Low
2. My understanding of how to teach a dialog is
 Low.....High
3. My understanding of how dialog learning fits into an audio-lingual program is
 High.....Low
4. My ability to adapt or supplement dialog material is
 Low.....High
5. I am able to determine when my pupils have learned a dialog
 High.....Low
6. My pre-conceived expectations of pupil achievement vs. pupil real achievement in ability to learn a dialog is
 Low.....High
7. My understanding of the purpose of a pattern drill is
 High.....Low
8. My understanding of how to teach a pattern drill is
 Low.....High
9. My understanding of how pattern drilling fits into an audio-lingual program is
 High.....Low
10. My ability to adapt or write pattern drills is
 Low.....High

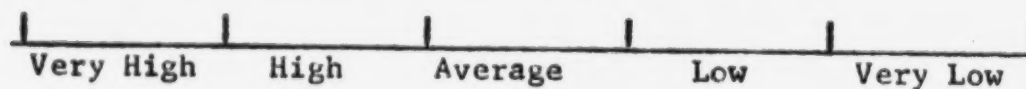
11. I am able to determine when my pupils have learned a pattern drill
High.....Low
12. My pre-conceived expectations of pupil achievement vs. pupil real achievement in ability to do pattern drilling is
Low.....High
13. My understanding of the purpose of abstract word teaching is
High.....Low
14. My understanding of how to teach an abstract word is
Low.....High
15. My understanding of how abstract word teaching fits into an audio-lingual program is
High.....Low
16. My ability to write additional material for abstract words if more is needed is
Low.....High
17. I am able to determine when my pupils have learned an abstract word
High.....Low
18. My pre-conceived expectations of pupil achievement vs. pupil real achievement in ability to understand abstract words is
Low.....High
19. My understanding of the purpose of generalization is
High.....Low
20. My understanding of how to do a generalization is
Low.....High

21. My understanding of how a generalization fits into an audio-lingual program is
 High.....Low
22. My ability to adapt or write material for generalization grouping is
 Low.....High
23. I am able to determine when my pupils have learned a grammatical concept (generalization)
 High.....Low
24. My pre-conceived expectations of pupil achievement vs. pupil real achievement in ability to learn grammar using generalization is
 Low.....High
25. My understanding of the purpose of a lesson plan is
 High.....Low
26. My ability to write a lesson plan for my classes is
 Low.....High

Anxiety Scale

Most prospective student teachers report feeling a great deal of anxiety before they begin their teaching. Indicate:

A. Your level of anxiety about student teaching

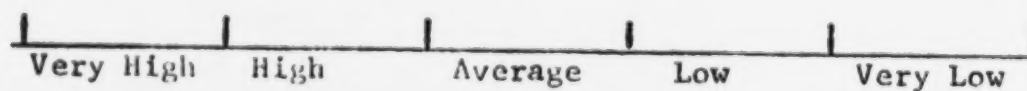


B. Can you name any experiences from this course which have helped reduce this anxiety?

C. What recommendations can you make to help reduce this anxiety for future student teachers?

Ability Scale

As a student teacher I feel my ability to teach Level I Spanish after this methods course is



Student Rating Scale

How do you rate the value of Education 540-B with the following courses? Use "1" for your first choice, "2" for your second choice, "3" for your third choice, etc.

- _____ Education 103
- _____ Education 435
- _____ Education 632 or 636 (History of Education)
- _____ Education 637 (Philosophy of Education)
- _____ Other methods courses, e. g., English, Science, Mathematics
- _____ Psychology 230 (Educational Psychology)
- _____ Education 540-B

Are you a major or minor in Spanish? Please circle.

From the following list of topics, some of which were covered in your methods course, please rank the five which you feel will benefit you the most when you teach. (Number "1" being the most beneficial.)

- _____ Teaching the dialog
- _____ Teaching of structure (grammar)
- _____ Teaching of vocabulary
- _____ Teaching of writing
- _____ Teaching of reading
- _____ Grammar generalization
- _____ Pattern practice
- _____ Lesson planning
- _____ Testing and Evaluation
- _____ Microteaching
- _____ Team teaching

Performance Centered Criteria
(Modified)

Evaluation of Classroom Performance

Teacher: _____

Evaluator: _____

Performance	Grade ¹	Positive	Negative
1. Audio-Lingual Activity			
2. Presentation of Basic Material			
3. Teaching of Structure			
4. Teaching of Pronunciation			
5. Teaching of Sound-Letter Correspondence			
6. Teaching of Reading			
7. Teaching of Culture			
8. Using Visual Aids			

Global Evaluation

¹Grade on a scale of 1 to 10: 10 performance by a very superior teacher
5 average teacher

Comment on all types of performance that you observe -- grade only those which were a substantial part of the class activity (at least about 10 per cent.)

APPENDIX B
INFORMATION FOR MICRO-TEACHERS

1. Microteaching Procedures: Upper Arlington High School
2. Microteaching Schedule -- Upper Arlington High School
Fall Quarter, 1969
3. Course Objectives and Lesson Plans for Spanish I Class

Microteaching Procedures: Upper Arlington High School

Microteaching sessions will be held at UAHS on November 13, 18, 20, and 25 from 1:04 until 3:50 p.m. This time will be divided into three sections, e. g., 1:04-1:56, 2:01-2:53, and 2:58-3:50. Sessions beginning at 1:04 will be called Section A; at 2:01, Section B; and 2:58, Section C.

Each section will be divided into two sub-sections: 1:04-1:25 (A1) and 1:30-1:56 (A2); 2:01-2:25 (B1) and 2:30-2:53 (B2); 2:58-3:20 (C1) and 3:25-3:50 (C2).

In each of these sub-sections, five micro-pupils will be assigned. Those who begin sub-sections A1, B1, and C1 will report to the micro-teaching center in the balcony where attendance will be taken. The other students will report to their study hall and then to the micro-teaching center for their assigned time, i. e., 1:30, 2:30, and 3:25. We will try to adhere to this schedule; however, there may be times when there will be overlapping of one to three minutes, especially in the A1, B1, and C1 sub-sections.

During the above time, we will need thirty micro-pupils from the study halls. In the A1, B1, and C1 sub-sections, there will be about three to four micro-teachers, depending upon the topic being taught.

N. B. All micro-teachers are expected, and should plan, to be in the school for a minimum of 1 1/2 hours. It is the only way we can insure a Teach-Re-teach cycle.

See next page for section times and teaching assignments.

Microteaching Schedule -- UAHS

Fall Quarter, 1969

A1 1:04-1:25			B1 2:01-2:25			C1 2:58-3:20		
Micro-teacher			Micro-teacher			Micro-teacher		
1.	Sadelfeld	T1	7.	Edmons	RT2	15.	Tuchman	T10
2.	Edmons	T2	8.	Druga	RT3	16.	Steger	RT6
3.	Druga	T3	9.	Steger	T6	17.	Nathanson	RT7
			10.	Nathanson	T7			
A2 1:30-1:56			B2 2:30-2:53			C2 3:25-3:50		
4.	Mead	T4	11.	Mead	RT4	18.	Maxwell	RT8
5.	White	T5	12.	White	RT5	19.	Miller	RT9
6.	Sadelfeld	RT1	13.	Maxwell	T8	20.	Tuchman	RT10
			14.	Miller	T9			

Symbols: T = first Teaching session; RT = Re-teach session.

Course Objectives and Lesson Plans for Spanish I Class

A. Objectives for one week of teaching:

1. Continue drill on --er verbs, aprender, beber, comer.
2. Drill dialog with adaptation.
3. Generalization on use of son las and a las with time. (Class has worked with A que hora tomas el desayuno? Tomo el desayuno a las siete. Que hora es? Son las siete.)
4. Generalization of al and a la. (Class has worked with this using --ir and the rooms of the house, e. g., Tu vas a la cocina. Juan va al dormitorio.)
5. Drill expressions of weather: hace frio, calor, sol, viento, buen tiempo; esta lloviendo, esta nevando; tengo calor, frio.
6. Drill contrast between jugar and tocar. Also drill these for form.
7. Review months and present seasons. (After initial presentation, ask questions such as Cuales son los meses del ano, del otono, de la primavera? or Que tiempo hace en el otono, en el invierno?)

B. Lesson Plans for one week of teaching

Monday

Review time and vocabulary for lesson in a warm-up activity.
Review aprender, comer, beber, and expressions of weather.
Review dialog with questions.
Drill jugar and tocar with questions.

Tuesday

Warm-up same as above.
Review --er verbs and weather.
Review dialog with questions.
Drill jugar and tocar.
Generalize son las vs. a las.

Wednesday

Warm-up same as above.
Drill --er verbs and weather.
Review dialog with questions.
Drill jugar and tocar.
Generalize al and a la with ir and rooms.

B. Lesson Plans, Continued

Thursday

Warm-up same as before.

Review dialog with questions.

Drill jugar and tocar.

Present seasons of year; review months.

Friday

Generalization of jugar and tocar.

Review dialog with questions.

Dictation over lesson three.

Review months, weather, and seasons.

APPENDIX C
CLASSROOM OBSERVATION SHEET

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Classroom Observation Sheet

Level of Class _____

Textbook _____

1. How do the physical surroundings of the classroom reveal the foreign language atmosphere?

Was the physical set-up of the classroom conducive to learning?

2. What number or percentage of the pupils participated actively in the class?
3. How many activities did the teacher direct?
4. What percentage of the class activities were conducted in the foreign language?
5. How much attention was given to listening and speaking skills?

To reading and writing?

(Did the teacher correct pronunciation?)

6. How effectively did the teacher use visuals?
7. What was the point (or points) of the day's lesson?

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